

## DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for the week ended 19th May 1894, on 161½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,621	14,857 8 0	42,032 0	8,393 5 0	101 0 0	25,351 13 0	5,937½	3,829	9,766½
Or per mile of railway ...	.....	92 0 10	.....	52 0 1	0 10 0	144 10 11	.....	.....	.....
For previous 18½ weeks of half-year ...	*460,687	*3,61,459 5 0	†13,04,900 20	†1,79,194 10 0	†1,509 0 0	5,42,162 15 0	110,404½	64,770½	175,175½
Total for 19½ weeks ...	489,308	3,76,316 13 0	13,46,932 20	1,87,587 15 0	1,610 0 0	5,65,514 12 0	116,342½	68,599½	184,941½
COMPARISON.									
Total for corresponding week of previous year ...	18,618	13,015 8 11	96,727 10	12,319 11 0	35 15 6	25,371 3 5	6,848	2,675	9,523
Per mile of railway corresponding week of previous year ...	.....	80 10 3	.....	76 5 3	0 3 7	157 3 1	.....	.....	.....
Total for corresponding 20 weeks of previous year ...	377,393	2,83,197 3 2	14,51,553 30	1,85,647 4 3	949 3 0	4,69,793 10 5	116,957	65,043	181,999

† Deducted number of passengers 7,086 and Rs. 1,384 } on account of difference between the approximate and audited figures for the week ended 14th April 1894.  
 ‡ Added Mds. 493 and deducted " 34 }  
 § Do. " 53 }

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for the week ended 12th May 1894, on 813 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	189,510	87,000 0 0	7,49,880 0	99,390 0 0	12,680 0 0	1,99,070 0 0	29,200	25,751	54,951
Or per mile of railway ...	233	107 0 0	922 0	122 0 0	*1 0 0	230 0 0	.....	.....	.....
For previous 18 weeks of half-year ...	3,590,790	17,64,024 0 0	1,48,36,703 0	19,70,261 0 0	5,00,077 0 0	42,34,362 0 0	520,891	551,227	1,072,118
Total for 19 weeks ...	3,780,300	18,51,024 0 0	1,55,86,583 0	20,69,651 0 0	5,12,757 0 0	44,33,432 0 0	550,091	576,978	1,127,069
COMPARISON.									
Total for corresponding week of previous year ...	167,800	75,674 0 0	7,05,725 0	86,142 0 0	8,787 0 0	1,70,603 0 0	28,625	26,920	55,545
Per mile of railway corresponding week of previous year ...	216	97 0 0	908 0	111 0 0	*1 0 0	209 0 0	.....	.....	.....
Total to corresponding date of previous year ...	3,438,307	16,36,801 0 0	1,44,53,367 0	18,02,186 0 0	3,07,496 0 0	37,46,483 0 0	542,409	546,258	1,088,667

\* Excluding steamer earnings.  
 † Audited up to 31st March 1894.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for week ended 19th May 1894, on 813 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	197,420	87,300 0 0	6,78,400 0	93,040 0 0	13,400 0 0	1,93,740 0 0	30,200	25,180	55,380
Or per mile of railway ...	243	107 0 0	834 0	114 0 0	*1 0 0	232 0 0	.....	.....	.....
For previous 19 weeks of half-year† ...	3,780,300	18,51,024 0 0	1,55,86,583 0	20,69,651 0 0	5,12,757 0 0	44,33,432 0 0	550,091	576,978	1,127,069
Total for 20 weeks ...	3,977,720	19,38,324 0 0	1,62,64,983 0	21,62,691 0 0	5,26,157 0 0	46,27,172 0 0	580,291	602,158	1,182,449
COMPARISON.									
Total for corresponding week of previous year ...	165,585	75,679 0 0	6,58,401 0	81,012 0 0	10,821 0 0	1,67,512 0 0	29,946	25,328	55,274
Per mile of railway corresponding week of previous year ...	213	97 0 0	847 0	104 0 0	*1 0 0	202 0 0	.....	.....	.....
Total to corresponding date of previous year ...	3,603,892	17,12,480 0 0	1,51,11,768 0	18,83,198 0 0	3,18,317 0 0	39,13,995 0 0	572,355	571,586	1,143,941

\* Excluding steamer earnings.  
 † Audited up to 31st March 1894.



## BENGAL CENTRAL RAILWAY.

*Approximate Return of Traffic for the week ended 12th May 1894, on 125 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.*	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	33,180	11,020 0 0	52,280 0	3,860 0 0	30 0 0	14,910 0 0	3,792	1,860	5,672
Or per mile of railway ...	265	88 0 0	418 0	31 0 0	.....	119 0 0	...	...	...
For previous 18 weeks of half-year* ...	599,310	2,07,554 0 0	10,51,318 0	67,460 0 0	2,432 0 0	2,77,446 0 0	69,048	32,278	101,326
Total for 19 weeks ...	632,490	2,18,574 0 0	11,33,598 0	71,320 0 0	2,462 0 0	2,92,356 0 0	72,840	34,158	106,998
COMPARISON.									
Total for corresponding week of previous year ...	32,110	10,074 0 0	71,461 0	3,549 0 0	54 0 0	13,677 0 0	3,792	1,864	5,736
Per mile of railway corresponding week of previous year ...	257	81 0 0	472 0	29 0 0	.....	109 0 0	...	...	...
Total to corresponding date of previous year ...	600,532	2,08,330 0 0	13,51,005 0	82,966 0 0	2,393 0 0	2,93,689 0 0	70,270	37,662	107,932

\* Audited up to 31st March 1894.

## BENGAL CENTRAL RAILWAY.

*Approximate Return of Traffic for the week ended 19th May 1894, on 125 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	32,370	10,650 0 0	53,360 0	3,780 0 0	100 0 0	14,530 0 0	3,823	1,849	5,672
Or per mile of railway ...	259	85 0 0	427 0	30 0 0	1 0 0	116 0 0	...	...	...
For previous 19 weeks of half-year* ...	632,490	2,18,574 0 0	11,33,598 0	71,320 0 0	2,462 0 0	2,92,356 0 0	72,840	34,158	106,998
Total for 20 weeks ...	664,860	2,20,224 0 0	11,86,948 0	75,100 0 0	2,562 0 0	3,06,886 0 0	76,663	36,007	112,670
COMPARISON.									
Total for corresponding week of previous year ...	29,675	10,085 0 0	55,605 0	3,669 0 0	69 0 0	13,823 0 0	3,823	1,849	5,672
Per mile of railway corresponding week of previous year ...	237	81 0 0	445 0	29 0 0	1 0 0	111 0 0	...	...	...
Total to corresponding date of previous year ...	630,207	2,18,415 0 0	14,06,610 0	86,635 0 0	2,462 0 0	3,07,512 0 0	74,093	39,511	113,604

\* Audited up to 31st March 1894.

## DACCA STATE RAILWAY.

*Approximate Return of Traffic for the week ended 12th May 1894, on 86 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,000	5,360 0 0	15,680 0	1,650 0 0	70 0 0	7,080 0 0	2,457	737	3,224
Or per mile of railway ...	208	62 0 0	182 0	19 0 0	1 0 0	82 0 0	...	...	...
For previous 17 weeks of half-year* ...	367,945	1,21,355 0 0	4,24,091 0	41,183 0 0	3,838 0 0	1,66,375 0 0	44,407	15,651	68,058
Total for 18 weeks ...	385,845	1,26,715 0 0	4,40,371 0	42,832 0 0	3,908 0 0	1,73,435 0 0	46,894	14,388	61,282
COMPARISON.									
Total for corresponding week of previous year ...	15,650	5,006 0 0	14,024 0	1,416 0 0	47 0 0	6,469 0 0	1,711	1,513	3,224
Per mile of railway corresponding week of previous year ...	194	58 0 0	163 0	16 0 0	1 0 0	75 0 0	...	...	...
Total to corresponding date of previous year ...	346,427	1,08,591 0 0	3,07,653 0	27,786 0 0	3,471 0 0	1,39,848 0 0	32,603	28,941	61,603

\* Audited up to 31st March 1894.

## DACCA STATE RAILWAY.

*Approximate Return of Traffic for the week ended 19th May 1894, on 86 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	22,590	5,420 0 0	14,970 0	1,390 0 0	290 0 0	7,100 0 0	2,487	737	3,224
Or per mile of railway ...	263	64 0 0	174 0	16 0 0	3 0 0	83 0 0	.....	.....	.....
For previous 19 weeks of half-year* ...	385,845	1,26,715 0 0	4,40,371 0	42,832 0 0	3,908 0 0	1,73,455 0 0	46,894	14,388	61,282
Total for 20 weeks ...	408,435	1,32,135 0 0	4,55,341 0	44,222 0 0	4,198 0 0	1,80,555 0 0	49,381	15,125	64,506
COMPARISON.									
Total for corresponding week of previous year ...	16,483	4,743 0 0	12,438 0	1,098 0 0	62 0 0	5,903 0 0	1,711	1,513	3,224
Per mile of railway corresponding week of previous year ...	192	55 0 0	145 0	13 0 0	1 0 0	69 0 0	.....	.....	.....
Total to corresponding date of previous year ...	362,910	1,13,334 0 0	3,20,096 0	28,884 0 0	3,533 0 0	1,45,751 0 0	34,273	30,354	64,627

\* Audited up to 31st March 1894.

## BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

*Approximate Return of Traffic for the week ending 19th May 1894, on 756 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open ...	120,600	(b) 50,670	4,97,240	75,690	13,710	1,40,070	12,525	21,290	34,115
Or per mile of railway ...	159'32	67'02	657'72	100'12	18'14	185'28	.....	.....	.....
For previous 18½ weeks of half-year (a) ...	2,033,234	8,85,752	8,301,494	1,203,070	2,22,353	23,11,175	269,278	356,976	626,254
Total for 19½ weeks ...	2,153,834	9,36,422	8,798,734	1,278,760	2,36,063	24,51,245	282,163	378,266	660,369
COMPARISON.									
Total for corresponding week of previous year on 756 miles open ...	106,558	40,044	540,288	77,341	17,181	1,34,566	13,711	21,482	35,193
Per mile of corresponding week of previous year ...	140'35	52'97	714'67	102'30	22'73	178	.....	.....	.....
Total to corresponding date of previous year ...	2,022,059	8,67,630	9,583,907	13,59,319	2,81,440	25,08,289	272,816	391,874	664,690

(a) Includes audited figures up to week ending 7th April 1894.

(b) Due to improvement in traffic.

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Approximate earnings for the week ending 12th May 1894	Rs. A. P.
Corresponding period of 1893	14,925 0 0
Increase	14,840 0 0
Receipts per mile for the week ending 12th May 1894	85 0 0
Corresponding period of 1893	292 10 4
Increase	290 15 11
Receipts from 1st January to 12th May 1894	1 10 5
Corresponding period of 1893	2,08,553 0 0
Decrease	2,18,350 0 0
	9,797 0 0





# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, JUNE 6, 1894.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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### RESOLUTION ON THE REPORT ON THE LUNATIC ASYLUMS IN BENGAL FOR THE YEAR 1893.

#### MUNICIPAL DEPARTMENT—MEDICAL.

RESOLUTION—No. 2450Medl.

*Dareeling, the 28th May 1894.*

READ—

The Report on the Lunatic Asylums in Bengal for the year 1893.

Read also—

The Report for the year 1892 and the Resolution recorded upon it.

The report under review, which has been submitted with punctuality, shows the statistics of the asylums in the revised forms prescribed by the Government of India during the year. The additional information required by this Government as to the three classes of criminal lunatics, viz.—

- (1) those tried and acquitted on the ground of insanity;
  - (2) those insane on admission and found incapable of making a defence;  
and
  - (3) those who became insane during imprisonment,
- has been given in the body of the report.

## 2. The statement on the margin, which gives details regarding the popula-

	1892.	1893.
1	2	3
Remaining on January 1st	963	951
Admitted and re-admitted	186	205
Total	1,149	1,156
Discharged cured	71	92
" improved	36	52
" not improved	1	6
" otherwise	6	13
Died	84	77
Total	198	240
Remaining on 31st December	951	916
Daily average strength	960	932

tion of the five native asylums during the year 1893, shows that though there was an increase of 19 in the number admitted during the year, yet, owing to the number of discharges and deaths taken together having been greater by 42, the daily average strength was 28 less than in the preceding year. The number of criminal lunatics in confinement decreased slightly: it was 445 on the 31st December 1893, against 449 on the 31st December 1892. The decrease, which has been going on steadily since 1890, when the number at the end of the year was 1,021, was principally among the non-criminal lunatics, and it is right that it should be so, for the retention of this class of lunatics is often of doubtful propriety, when they are not harmful and have relatives who ought to and could support them.

3. Of the 205 admissions and re-admissions, 103 were criminal lunatics and 102 non-criminal, against 98 and 88 respectively in the preceding year. The increase occurred in all the asylums; that at Dacca was the largest and was due to the transfer to that asylum from Cachar of fourteen lunatics, against two in the preceding year. The re-admissions during the year numbered 24, or four less than in 1892. The decrease occurred in all the asylums except Berhampore, in which eight were re-admitted, against two in the year before. It is explained, however, that of these eight re-admissions, six were those of lunatics who, having been released to stand their trial, were ordered back to the asylum after judgment had been passed. A similar explanation is given of the large number of re-admissions that occurred during 1892, in regard to which an enquiry was ordered in last year's Resolution. The Lieutenant-Governor desires that re-admissions of this class, as well as the cases of those non-criminal lunatics who are re-admitted to the asylum after having been released at the request of their friends, although not cured, may in future be distinguished from ordinary re-admissions of persons who having been discharged as cured, are afterwards re-admitted as insane.

4. The number of lunatics discharged was 163 as compared with 114 in the previous year. The increase occurred almost entirely in the Dullanda asylum. This satisfactory result is partly due to the class of cases treated, there having been an unusual number of recoveries from toxicinsanity, but it is chiefly owing to the success that attended the praiseworthy efforts of the Superintendent in finding out the friends of harmless lunatics and in inducing them to take charge of them. Thirty-six were in this manner made over to the custody of their friends, as against twelve so disposed of in 1892.

5. Out of the 445 criminal lunatics remaining under confinement at the close of the year, 176 belonged to the first, 242 to the second, and 27 to the third of the three classes enumerated in paragraph 7 of the report, against 179, 241 and 29 respectively in the year before. The daily average number, as well as the number remaining in confinement at the end of the year, has decreased steadily, though slowly, from 1891 onwards.

6. The extension of the Asylum at Berhampore to provide for 64 additional male lunatics was completed during the year under review. The five native asylums now provide accommodation for 1,133 patients, calculated at 50 superficial feet for each patient. There was no overcrowding except in the female wards at Dacca. It is reported that no inconvenience or injury to health resulted from this overcrowding, but as it is likely to continue, the Inspector-General of Civil Hospitals suggests that the accommodation may be increased. Separate orders will be passed on this recommendation.

7. In 55 cases out of a total of 205 admissions and re-admissions during the year, the cause of insanity is alleged to have been the consumption of



ganja. It seems that whenever a lunatic is reported by the police to be a ganja-smoker, it is too easily assumed that that drug is the cause of insanity, and the Lieutenant-Governor agrees with Dr. Harvey in thinking that in past years many cases have been attributed to ganja on most insufficient grounds. The whole question of the effect of the consumption of this drug upon the social and moral condition of the people is now under the consideration of the Hemp Drugs Commission, and their report will doubtless show to what extent the use of hemp drugs is the cause of lunacy.

8. The health of the inmates of the asylums during the year under review shows an improvement; the average daily number in hospital being 49·25, against 54·06 in 1892, and the percentage of chronic invalids to average strength being 5·28 against 5·62. There was a small increase, however, in the number of admissions into hospital owing, it is said, to the treatment of a larger number of trifling cases in the hospitals. At Dullanda, Dacca, and Patna there were more admissions into hospital than in 1892, while Berhampore shows a decrease. The increase at Dullanda was due to the prevalence of fever and dysentery to a greater extent than in the year before, while that at Dacca is attributed to influenza, of which 87 cases occurred during the year, against none in 1892. The increase at Patna was due chiefly to an increase of fever. Cases of sporadic cholera occurred at Dullanda, Dacca and Berhampore, but there was no general outbreak. There were 77 deaths during the year, against 84 in 1892, and the percentage of deaths to average strength was 8·26 against 8·74. There were no great variations in the hospitals, the minimum rate being 7·04 and the highest 9·8. This rate compares favourably with the figures given by Dr. Harvey for European asylums as well as for asylums in the other provinces of India, and the Lieutenant-Governor concurs in his opinion that the results afford good evidence of the excellent hygienic condition under which the lunatics live and of the care which is taken of them.

9. There were ten cases of injuries and accidents, against eleven in 1892 and 16 in 1891. Of these ten, six occurred at Dullanda, of which three were due to accidents and three to assaults by lunatics on lunatics; in Dacca there was one case of injury by an accident, and one in which a patient struck by a jamadar and two keepers sustained a fracture of the rib. In Patna one lunatic broke his arm in a fight, and at Cuttack there was one accident. The officials through whose misconduct or neglect these injuries and accidents occurred appear to have been suitably punished in each case.

10. There were, as in 1892, two escapes—one from Dacca and one from Berhampore. Both the lunatics were recaptured, and the keepers, through whose negligence the escapes occurred, were adequately punished.

11. The following statement compares the income and expenditure during the past two years :—

INCOME.

		1892.			1893.		
		Rs.	A.	P.	Rs.	A.	P.
1.	Received from Treasury	63,232	6	9	62,020	12	4
2.	Ditto from paying patients	1,754	7	6	2,355	12	6
Total		64,986	14	3	64,376	8	10
3.	Received from Manufacturing Department	18,084	14	10	16,273	14	4
4.	Ditto from Public Works Department, Medical Stores Depôt and Stationery Office	3,221	3	0	6,138	13	3
GRAND TOTAL		86,293	0	1	86,789	4	5

## EXPENDITURE.

		1892.			1893.		
		Rs.	A.	P.	Rs.	A.	P.
1.	Establishment proper	...	...	16,230 11 3	16,629 2 8		
2.	Superintendence	...	...	15,936 12 10	16,586 3 10		
3.	Diet	...	...	37,469 13 6	36,155 11 7		
4.	Clothing and bedding	...	...	2,572 7 0	2,318 2 0		
5.	Bazar medicines	...	...	87 8 9	85 0 4		
6.	Contingencies, proper	...	...	6,402 7 10	4,934 7 1		
7.	" manufacture	...	...	2 1 5	.....		
8.	Repairs and maintenance	...	...	452 14 6	527 4 8		
9.	Rates and taxes	...	...	3,917 0 0	3,414 7 0		
10.	Miscellaneous	...	...	.....	.....		
11.	Printed forms and stationery	...	...	76 3 8	120 11 1		
12.	English medicines	...	...	608 5 4	737 13 6		
13.	Public works	...	...	2,536 10 0	5,280 4 8		
Total		...	...	86,293 0 1	86,789 4 5		

The expenditure under the head "Diet" shows a decrease of Rs. 1,314-1-11 as compared with 1892. The decrease occurred at all the asylums, except Dacca and Cuttack. The average cost of each lunatic on account of diet was—Dullanda Rs. 41-9-5, Dacca Rs. 44-11-6, Patna Rs. 32-3-2, Cuttack Rs. 38-7-1, and Berhampore Rs. 35-15-4, against Rs. 42-13-2, Rs. 40-13-2, Rs. 34-7-8, Rs. 36-6-5, and Rs. 37-12-3, respectively, in the preceding year. The cost of diet of each prisoner in the neighbouring jails in 1893 was—Alipore Rs. 27-12-6, Dacca Rs. 28-11-11, Patna Rs. 19-0-8, Cuttack Rs. 23-0-11, and Berhampore Rs. 24-10-4.

12. The following statements compare the gross cost of each lunatic at the different asylums during the past two years and the cost per head of average strength, taking all charges into account:—

		1892.			1893.		
		Rs.	A.	P.	Rs.	A.	P.
Dullanda	...	111	15	8	108	5	2
Dacca	...	87	3	9	93	6	8
Patna	...	76	4	11	78	0	10
Cuttack	...	175	4	6	166	7	9
Berhampore	...	72	15	4	84	6	9
Average cost in all asylums	...	89	13	4	93	1	11
Details of Cost.							
Establishment	...	33	7	10	35	10	3
Diet	...	39	0	1	38	12	8
Clothing and bedding	...	2	10	10	2	7	9
Medicine	...	0	11	7	0	14	2
Contingencies and miscellaneous	...	7	2	3	5	13	9
		83	0	7	83	10	7
Public Works Department charges	...	2	10	3	5	10	8
Rates and taxes	...	4	1	3	3	10	7
Forms and stationery	...	0	1	3	0	2	1
		89	13	4	93	1	11

The number of inmates in the Cuttack asylum being very low, the charges on account of establishment and superintendence swelled the average cost per head. The high average at Dullanda was due partly to the payment of a larger amount on account of rates and taxes than at Dacca, Patna, and Berhampore, and partly to wages and cost of provisions, &c., being higher in Calcutta than in the other towns in which the asylums are situated. The Lieutenant-Governor agrees with the Inspector-General of Civil Hospitals that the asylums are carefully and economically managed, and that the differences in the actual cost were due to local conditions and to accidental causes which vary from year to year.



13. The number of paying patients rose from 31 in 1892 to 34 during the year under review; but the receipts from this source fell off at all the asylums except Dullanda. The Lieutenant-Governor desires to invite the special attention of all officers concerned to Government circular No. 42 of the 3rd December 1891, and to impress upon them the necessity of following strictly in future the instructions therein contained. The Superintendent of the Native Lunatic Asylum, Calcutta, has suggested that the cost of pauper lunatics should be charged to the Municipality from which they are sent. This question was considered in 1892, and it was then decided that to give effect to this suggestion legislation would be necessary, which the Government was not prepared to undertake. The Lieutenant-Governor still adheres to this view.

14. The experiment of establishing dairy farms at lunatic asylums was further continued during the year. As a commercial enterprise it has not generally proved successful, but since the plan ensures a plentiful supply of good milk to the inmates, the Lieutenant-Governor agrees that it may have a further trial so long as it pays its way.

15. The total population of the European asylum at Bhowanipur during the year was 64, against 61 in 1892. Of this number, 35 were under detention on the 1st January 1893, and 29, of whom two were criminal lunatics, were subsequently admitted. During the year 9 persons were discharged cured, 2 were deported to Europe under the Merchant Shipping Act, 6 were transferred to the care of friends, 1 was despatched to Europe as still insane, 1 was discharged, and 4 died, leaving 41 under confinement at the close of the year. There was no want of accommodation in the male ward, but, notwithstanding the additional accommodation provided in 1891, there was a certain amount of overcrowding among the females, whose number has been steadily increasing for the last five years. The question of still further adding to the accommodation for female lunatics has lately been under the consideration of Government, but owing to the financial exigencies of the province, the Lieutenant-Governor has been compelled to defer sanction to the proposals till a more favourable time arrives. The general health of the inmates of the asylum was good, and there were no injuries, accidents or escapes. The total expenditure for the year was Rs. 21,805, against Rs. 22,831 in 1892.

16. The Report of the Committee appointed in 1892 to undertake the revision of the rules for the control and management of lunatic asylums in Bengal, referred to in paragraph 13 of the Resolution on the Report for 1892, has been received since the close of the year, and is now under consideration.

17. The opinions of the Superintendents of Asylums and of the Inspector-General of Civil Hospitals on the rules drawn up by the Committee appointed in 1891 to consider the question of guarding criminal lunatics in asylums were received and considered during the year. It appeared that these rules were already in force at Dullanda and Patna, that the rules in force at Berhampore were necessitated by the peculiar arrangements of the buildings, that at Dacca the system peculiar to that asylum and which was approved by the Committee was adopted, and that this system was also in force at Cuttack. The Inspector-General of Civil Hospitals recommended that things should be left as they were, and the Lieutenant-Governor agreed to the proposal. To give effect, however, to the proposal of the Committee to provide amusements for the lunatics, the Superintendent of each Asylum was authorized to make such arrangements as he thought fit, and to incur expenditure up to a limit of Rs. 10 per mensem with the object of carrying out the suggestion.

18. The report is submitted by Dr. Harvey, who assumed charge of the office of Inspector-General of Civil Hospitals in November 1893. The thanks of the Lieutenant-Governor are due to him for the report and for the punctuality with which it has been submitted. His Honour also notices with satisfaction the commendatory terms in which the Inspector-General is able to speak of the work of the Superintendents of the Asylums which he visited, and of that of his subordinates.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

*Offg. Secretary to the Government of Bengal.*

## RESOLUTION ON THE SURVEY AND SETTLEMENT REPORTS.

REVENUE DEPARTMENT—LAND REVENUE.

*Darjeeling, the 30th May 1894.*

RESOLUTION No. 118T-R.

READ—

Letter No.  $\frac{577A}{8}$ , dated the 28th April 1894, from the Board of Revenue, submitting the Reports of the Director of Land Records on Settlements and the Director of Bengal Surveys on Surveys, during the year ending the 30th September 1893.

THE date for the submission of these Reports to the Board was changed from the 15th November to the 15th December, but no improvement in punctuality has been thereby gained. The Settlement Report is dated the 7th March, and reached the Board on the 19th idem: the Survey Report bears date the 28th February, but was not in the Board's hands until the 29th March. The result is that they did not reach Government until the beginning of May, instead of by the 15th January, when they were due. The relaxation in the date fixed was a mistake. It is essential, not so much for the convenience of Government as for the Director's own sake, that they should have their reports written and off their minds before the active inspection work of the new season begins, that is, before the end of October. The delay has not lain with them so much as with the Settlement Officers and Survey Officers, and with the difficulty of reconciling discrepancies between the figures emanating from the two Departments: but there is no reason why the individual Settlement Officers should not have their reports ready in time and their figures in harmony with the survey figures, if they post them up from month to month, and do not postpone the compilation of statements and the rectification of discrepancies till the year is ended. Sir Charles Elliott trusts that, as greater experience is obtained and these reports are more systematized, it will be found possible to observe greater punctuality in their submission.

2. The Director of Land Records has been relieved by Government of the charge of supervising the smaller settlements under the Tenancy Act. Under these orders 66 settlements in 12 districts have been transferred to Commissioners of Divisions. The Director states that he still receives the budget estimates for all districts for petty settlements, and is required to report on proposals for all operations under the Tenancy Act. The Lieutenant-Governor thinks that the time has come for the Director to be entirely relieved of this work, except in the cases in which a professional survey party is engaged on such smaller settlements. These duties should be performed by the Board in conjunction with the Collectors and Commissioners, and they will be rendered easier when the manual of standard procedure, which the Lieutenant-Governor desired the Board last year to have drawn up, and which has been prepared, is issued. Colonel C. Strahan, R.E., was in charge of the Bengal Surveys from the 1st to the 20th October 1892, when Colonel Sandeman, the substantive Director, returned from leave and resumed charge, retaining it for the rest of the year. The latter inspected all the large surveys, some of them more than once, and was about nine months on tour, inclusive of short halts in Calcutta when passing from one camp to another. Mr. W. C. Macpherson, C.S., who submits the Settlement Report, was in charge of the Office of Director of Land Records throughout the year without intermission. He was on tour for 164 days, distributed among every month of the year with the exception of May and June. The Lieutenant-Governor is thoroughly satisfied with the activity displayed by both the Directors in touring and inspecting, and, with one or two exceptions, no instance of any deficiency in this respect on the part of the Settlement and Assistant Settlement Officers and Survey Officers has been brought to his notice. The arrangement and general preparation of both the Reports under review are generally approved by Government with certain exceptions which will be mentioned in this review.



3. The Settlement Report shows operations in progress in every Division except the Presidency, while survey work has been carried on in six of the nine Divisions. The following arrears were under the Director of Land Records' control:—(1) for settlements of revenue in temporarily-settled tracts and Government estates (inclusive of portions of permanently-settled estates under survey), 8,895 square miles; (2) for survey and records of rights in private estates, 1,618 square miles; (3) for survey and record of rights in Wards' estates, 1,977 square miles: total 12,490 square miles. This is about one-twelfth of the whole area of the Province of Bengal.

The following statements show the general outturn and cost of the work under the control of the two Directors during the year 1892-93, as compared with 1891-92, according to the reports received:—

*According to the Settlement Reports for the years ending 30th September 1892 and 30th September 1893.*

	Area surveyed cadastrally in square miles.		Cost of survey.		Cost of settlement.		Total cost.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	2	3	4	5	6	7	8	9
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Temporarily settled tracts and Government estates ...	2,494	1,829	5,65,243	4,18,828	3,89,445	3,85,629	9,54,688	8,04,457
2. Private estates ...	31	1,250	8,080	3,19,540	24,854	79,321	32,914	3,98,861
3. Wards' estates ...	25	54	18,946	46,941	52,201	56,011	71,147	85,952
Total ...	2,550	3,133	5,92,269	7,85,309	4,66,480	5,00,961	10,58,749	12,89,270

*According to the Survey Reports.*

	Traverse survey.	Skeleton boundary survey.	Forest survey.	Topographi- cal survey.	Cadastral survey.	Record- writing.	Hill sketch- ing.
1	2	3	4	5	6	7	8
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
1891-92 ...	4,712	187	327	362	2,290*	1,452	194
1892-93 ...	5,283	1,247	...	...	3,090	2,912	...

\* Inclusive of 364 square miles of revision survey of the irrigation survey of 1878 in Orissa (scale 32' = a mile).  
N.B.—The report on settlements includes some small surveys which were not conducted under the Director of Surveys; and the report on surveys includes some surveys with which the Director of Land Records was not concerned.

These figures show that the work done has increased as compared with the previous year, its character varying as the larger operations pass on from Chittagong and Orissa to Bihar. The settlement operations in progress have for their object the preparation of a record of rights, and those in temporarily-settled estates have as a further object the reassessment of the land revenue. The cost of surveys and settlements incurred by Government from the beginning of the operations up to the 30th September 1893, in the three large areas under settlement of land revenue, viz., Orissa, Chittagong and the Western Duars, has increased from about 19 lakhs to nearly 27 lakhs of rupees; but it is too early as yet to frame a general estimate of the increase of revenue which will be obtained in Orissa and Chittagong. The total expenditure on account of survey and settlement proceedings in Wards' estates in 1892-93 is shown as Rs. 85,952 (but this is exclusive of the expenditure in the Sarail pargana, which has not been included, as it should have been, in Appendix I to the Report of the Director of Land Records) against Rs. 71,147 (exclusive of survey expenditure in the Burdwan Raj estates) returned for 1891-92. In private estates in which settlement operations were conducted under the Director of Surveys and Land Records in 1892-93, the expenditure incurred was Rs. 3,98,861 against Rs. 32,914 expended in the preceding year; the higher figures indicating the extent of the work undertaken in the Maharaja of Hill Tippera's estates and in North Bihar.

4. The statistical tables furnished in the Director of Surveys' report are excellent, and the Director of Land Records will be desired to improve his formal statements Statistics and reports. up to the same standard. There is, however, room for improvement in the arrangement of the information in both reports, and some suggestions will be useful to both Directors in drawing up their reports for the present year. The cardinal point to remember is that survey and settlement work is divided under six main heads: (1) Traverse survey, (2) Cadastral survey, (3) Record-writing or *khanapuri*, (4) Attestation and draft publication, (5) Case work, (6) final publication. Of these the first two stages are under the Director of Surveys exclusively, the last three under the Director of settlement exclusively, and the third under both combined. Colonel Sandeman's treatment of the first two stages leaves little to desire, but for the third stage he should record the amount of inspection done by Survey and Assistant Survey officers and by Inspectors, showing the number of officers, the number of villages inspected, and the number of fields, the entries of which have been tested by them on the spot. The figures in all tables in both the reports should be separately given for each separate district, not for the whole of North Bihar or Orissa. The report of the Director of Settlements should carry on the story from the *khanapuri* stage, and it might be somewhat abbreviated by omission or curtailment of the statistics of traverse and cadastral survey already included in the Survey report. With regard to the third or *khanapuri* stage, he should give similar information as to the number of Settlement and Assistant Settlement Officers engaged in inspection, and the amount done by them. With regard to the next stage, attestation, he should show for each district (a) the number of officers employed, (b) the number of plots, (c) of tenants, (d) of villages, (e) of square miles attested, and (f) the number of draft publications of records. Here would follow remarks on the adequacy of the amount of work accomplished and on those officers who have done best or worst in this respect, with explanations of the causes which may have led to any failure to work up to the programme. Under the next head should be reported for each district the amount of case-work performed, such as (a) boundary disputes, (b) settlements of fair rents under section 104, (c) objections preferred under section 105 of the Tenancy Act, (d) disputes decided under section 106, (e) cases appealed, (f) decisions upheld, (g) decisions reversed. As regards settlement of fair rents, a table should show the number of villages in which the cases have arisen, the number of tenants involved, the existing rents and the rents settled by decisions of courts. In connection with decisions appealed against, information should be given of the class of decisions and the grounds for reversal whenever any point of importance or of general interest is involved. Under the last head would come information as to the number of villages whose records had been finally published, the fairing of records, and the apportionment of costs, if any has been made. The reports submitted by the Settlement Officers also admit of improvement in substance and arrangement in some cases. They are not always as full as they might be. They should recount the principal matters which have occupied attention during the year; show the progress attained under chief heads and compare it with the programme; state the expenditure as compared with the estimate, and work out the rates of costs per square mile and acre. The Director of Land Records should be instructed to prepare abstract forms for exhibiting the principal facts thus summarized, and such others as he may think necessary. Appendices I and II of his report should be continued, but they combine the results for the whole province; and what is referred to here is the information required as to the main results in each district in the body of the Report. The Lieutenant-Governor understands that the Board have already had under consideration the method of preparation of the annual reports of Settlement Officers and the statistical forms to be attached thereto. In the Survey Report the estates should be dealt with in the groups and order followed in the Settlement Report for the year 1892-93.

5. In the Government Resolution on the Survey and Settlement Reports of 1891-92, considerable space was devoted to a Survey and Settlement Procedure. description of the more uniform procedure for conducting survey and settlement operations throughout Bengal, which had been introduced under Sir Charles Elliott's authority, by the Directors of Bengal



Surveys and Land Records; and a contrast was drawn between, on the one hand, the disadvantages of the Chittagong procedure, under which the two Departments worked separately and without any mutual support, and, on the other hand, the improvements effected in Bihar and Orissa by the new procedure, which, by the amalgamation of the two Departments as parts of one establishment working jointly towards a common end, ensured greater despatch, precision and cheapness. Colonel Sandeman in his present report for the season 1892-93 has dwelt fully on this subject, and is much impressed by the advantages ensured by the "new system" under which—

"the amalgamation of the two Departments of Survey and Settlement, as parts of one establishment working jointly to a common end, was insisted on as the radical principle on which all concerned should act. Thus each cadastral camp became *de facto* the settlement office, and the survey inspectors and amins or patwaris became the Settlement Officers' establishments for all the purposes for which two separate establishments had previously been employed in the field. The Extra Assistant Superintendents and Sub-Assistant Superintendents of Survey supervised the construction of the maps, and, acting under the orders of the Settlement Officer, the writing of records, which proved a tangible accession of strength to the Settlement Officer, under whose responsibility the record-writing was done. The Deputy Superintendent of Survey acted jointly with the Settlement Officer and supervised all the professional work. Such a system made it possible to have one process in the field and in office instead of several, and one establishment for the execution and supervision of the maps and records in place of two. In the one operation all that is necessary for the completion of the records was done, and the final attestation is the only after-stage. This is now proceeding at the Settlement and Assistant Settlement Officers' camps."

and he further writes:—

"There is a radical difference between this procedure and that formerly\* prevailing, when the survey officials were held responsible for the accuracy of the record-writing, which was not completed in every particular, but only certain columns of the khasra were filled in at the khanapuri stage."

\*i. e., in 1891-92.

The Board, however, in reviewing the present Reports, profess themselves unable to see any difference in principle between the old and the new procedure, and they have contradicted, while they have made no reference to, what was written on this subject in last year's Resolution.

His Honour understands the Board's contention to be, in the main, that the two Departments of Survey and Settlement were always intended to be amalgamated and to co-operate in the field in professional surveys, as is necessarily the case in non professional proceedings. They are to a certain extent correct in this contention, and while Mr. Collin was in charge of the experimental survey in Muzaffarpur, no serious defects seem to have existed; but later on the practice seems to have diverged from the original lines, and until the year 1891, in tracts where a professional survey was engaged, not only were these intentions often not carried out, but the arrangements made were often such that it was not possible that they should be carried out. Too frequently a Settlement Officer was not appointed until the record-writing had already been taken in hand and considerably advanced by the Survey Department; and then the Settlement Officer, appointed too late, set to work to pull to pieces and find fault with those records. Thus the Settlement Officer of the Dakhin-Shahbazpur estates reports (page lxxxii, Settlement Report) that the survey party finished its work and made over its records to him between November 1891 and May 1892. "But as the tenures and complications of interests were not properly understood by the party, the records were incomplete and defective and had to be done nearly all over again." Again on page lxxi of the Report will be found the following remark by Babu Sukumar Halidar, Settlement Officer of the Burdwan Raj estates: "The inaccurate state of the survey records, due partly to the original record-writing having been done in Urdu by amins ignorant of the local language, partly also to the khanapuri being carried out without the supervision of a Settlement Officer, partly to the fact that the tenants were not supplied with parchas at the time of the survey, has made this work one of great difficulty." The same procedure tainted and delayed the work in the Western Duars, in Sarail, and in other places where professional parties were employed; and it was actively in progress in Orissa when the Lieutenant-Governor first visited Cuttack in March 1891. The two Departments were working as separate units between which there was

no harmonious action, but constant friction; they went over the same ground separately. The Survey Department made the cadastral survey, and only recorded the facts of undisputed possession in the khasras. Far from co-operating, the Settlement Officers held themselves in no way responsible for the record-writing of the survey, and it was not till the season of 1891-92 had nearly ended that precise instructions for the record-writing were drawn up by the revenue officials and placed in the hands of the Survey Officers. The system which had the support of the Settlement Manual of the time, and which was followed in former seasons, was to depute a second establishment of munsarims and muharrirs to go over the whole ground again, after the Survey Department had left the field, in order to correct mistakes and effect a preliminary attestation. This establishment often worked under far less effective control than the distrusted survey amins. This dissociation of interests culminated in the system adopted in Chittagong, where the work was broken up into four distinct sections. *First*, the Survey Department made the cadastral survey showing on the map all the minute sub-divisions of the fields, and gave a tracing of the map to the Settlement Department; *secondly*, the Settlement Department took the trace and prepared the khasra, leaving the area column blank, and marked the true fields on the trace, striking out the superfluous lines of subdivision; *thirdly*, the Survey Department inked the maps, extracted the areas, numbered the fields, and returned the maps with area lists to the Settlement Department; *fourthly*, the Settlement Department entered the areas in the records and proceeded with the record-writing and subsidiary work. In 1892-93, on the other hand (except in Chittagong), the Revenue Officers, of whom a strong staff was appointed for the purpose in Orissa and Bihar, took over the survey establishment, and through this one establishment under their own supervision and responsibility, completed the record-writing in all particulars inclusive of the separation of interests in the land, the recording of rents, and, as far as possible, the settlement of disputes at the khanapuri stage. Precise rules approved by both Departments were drawn up, and there were complete co-operation and mutual support. In addition to more harmonious working, there is no doubt that far greater accuracy has been obtained in the record-writing, as well as greater economy. The attestation officers, who have taken up the records written in 1892-93, are employed on attestation work proper, and not chiefly in completing records only partly written at the khanapuri stage. The working of the procedure of 1892-93 is referred to by the Settlement Officer of Orissa in paragraph 6 of his report of the 10th May 1893, in the following words:—

"The object of the new system was to have the khanapuri so supervised at the time that it is being done by the Assistant Settlement Officers that the records will be sufficiently correct to enable final attestation to be done at once from them without the necessity of sending irresponsible, ignorant and untrustworthy muharrirs into each village before final attestation to correct errors preliminarily and to settle as many disputes as possible. The process consists in the Assistant Settlement Officers, aided by select kanungos and head Inspectors, moving rapidly about among the villages as kanapuri is in progress, and immediately correcting such errors as they find the khanapuri amins making, and bringing the mistakes to the notice of the camp officers, so that general corrective orders may be issued. .... It may confidently be anticipated that the system has done much good by correcting broad errors made by amins and Inspectors."

The fundamental difference between the procedure of 1892-93 and that previously in force was therefore that it was sought in that season, by the appointment of a strong staff of Revenue Officers, to inspect the khanapuri as it was being carried on in the villages, and to decide disputes and difficulties as they arose, and by the fusion of the survey and settlement staffs to obtain more correct and complete records at the initial stage of the work.

6. The anticipation formed last year that the employment of local agency on surveys and settlements would materially reduce the cost has not been realized. The attempt to utilize such agency was chiefly made in Bihar.

Training of local surveyors.

In Muzaffarpur very little was done in this respect, and the survey was mostly carried out by amins from the North-Western Provinces, who were not, however, here (as in Bengal) under the disadvantage of not knowing the language. In Champaran great hopes were entertained that the work in Bettiah could be done by the patwaris, or at least by their relatives or substitutes, local men who knew the raiyats and the tenures, and whose knowledge of surveying and of the



records would, it was hoped, be useful either to the estate or to Government afterwards. It was found, however, impossible to compel them to turn out an adequate amount of work. In April 1893, the difficulties which were experienced in working with the unregistered, unreformed and uncontrolled patwaris in Bettiah were reported by the Director of Surveys, and questions arose as to the legal powers which could be exercised over the patwaris. During the recess the registration of the patwaris was ordered, but afterwards, when it was found that the zamindars did not support the scheme, it was decided to work through professional amins in future instead of the patwaris. Some 200 local men have been instructed as amins, but the service is not popular. Colonel Sandeman reports that the divorce of the patwari from a share in the operations finally dissolves the hope of obtaining a low rate of cost, as compared with that of a survey made by similar agency in other Provinces. The Survey Schools, whether of Patna or of Cuttack, have been found so ineffectual in providing a staff of local men fit for employment of this class, that some doubt has been entertained as to the utility of these schools, and the Director of Public Instruction has been consulted about their retention.

7. In the following paragraphs the progress made in the larger survey settlements will be reviewed in the same order as last year.

By the end of the season, of the whole area of 12,524 square miles of the four districts in North Bihar which have been notified for survey, 7,159 remained for traverse, 11,165 for cadastral survey, and 11,419 for record-writing. The work done during the season is exhibited in the following statement:—

	TRAVERSE SURVEY.		CADASTRAL SURVEY.		RECORD-WRITING.		Total cost of cadastral survey and record-writing.	COST RATE PER SQUARE MILE.			Cost of survey and record-writing per acre.	Expenditure on settlement.	Cost of settlement per acre of record-writing.
	Area in square miles.	Cost.	Villages.	Area in square miles.	Villages.	Area in square miles.		Traverse survey.	Cadastral survey and record-writing.	Total cost.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Muzaffarpur	997	Rs. 38,515	1,153	529	1,052	466	Rs. 76,413	Rs. A. P. 38 9 7	154 6 5	193 0 0	Nearly 4½ as.	Rs. 34,301	Nearly 2 as.
Champaran ...	1,103	30,654	244	416	234	320	41,182	27 12 10	116 1 7	143 14 5	„ 3 as.	21,732	„ 1½ as.
Saran ...	894	34,627	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Darbhangha ...	Nil	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

The total work done up to 30th September 1893 was as follows:—

	Traverse survey.	Cadastral survey.	Record of rights.
1	2	3	4
	Sq. miles.	Sq. miles.	Sq. miles.
Muzaffarpur ...	(a) 3,047	(b) 943	(c) 785
Champaran ...	1,466	416	320
Saran ...	894	.....	.....
Darbhangha ...	.....	.....	.....

including (a) 803, (b) 414, (c) 319, done in 1885-86.

It appears from the Settlement Officer's report, to which the Board have drawn attention, that under a system which has since been discontinued, the large sum of Rs. 29,947 was advanced in Champaran during the year under report by landlords and paid to patwaris and coolies; this amount (or at any rate so much of it as represents work done) will have to be either allowed as a set-off in the apportionment of expenses, or otherwise recouped to the landlords. The Lieutenant-Governor trusts that accounts have been kept of these advances, and that they can be properly adjusted. Various reasons, including those mentioned in the preceding paragraph, are given to explain the high cost of the work in North Bihar during the first season, and it is expected that the rates of cost will diminish as further experience is gained and larger

areas are completed, At present the daily outturn of survey work performed by the amins, and the number of fields entered in the khasra by amins or muharrirs, is far below what is expected of a staff thoroughly trained and acquainted with the language and tenures of the people. The parties which in the present programmes are set down to cover 500 square miles in the season ought to be able to cover 750 square miles, and the Lieutenant-Governor has no doubt that Colonel Sandeman, in the course of time, if sufficiently left to himself and unhampered by changes of system, will be able to get this work out of them, and will thereby bring down the entire cost of all survey operations, not only to Rs. 160 per square mile, but considerably below that rate.

8. The satisfactory progress attained in the record-writing in Bihar is attributable largely to the careful instructions drawn up by the Settlement Officers and by the Director of Land Records after a careful study of local facts and conditions. The unit of map and record is the village as pointed out by the people, but where the area of the village, as it stands at present according to the boundaries pointed out and accepted by the people themselves, differs substantially from the old revenue survey village, the boundaries of the old revenue survey village have been also marked on the new maps to connect them with the old revenue survey. The general explanatory notice of the objects of the survey and its procedure, drawn up with the approval of Government in February 1893 and widely circulated in English and the vernacular, was calculated to reassure the people. There was much less obstruction to the traverse survey than in the previous year, but it is difficult to make the people understand that the traverse lines cannot be taken exactly along the boundaries, and do not prejudice their rights. The Director of Land Records considers the attitude of the people generally in North Bihar towards the survey and settlement operations to be at least as favourable as could have been expected. Much interest has been shown by the raiyats in obtaining parchas and in ascertaining that their rights have been correctly recorded, though this feature has been less noticeable in Champaran than in Muzaffarpur. He has been much struck by the patient attendance of landlords and tenants during the record-writing and the attestation proceedings. The Lieutenant-Governor concurs in Mr. Macpherson's opinions as here quoted. On his inspection visits to the settlement and survey camps, he has seen no trace of the ignorance and indifference to their rights, which the Champaran raiyats are said to have displayed. They seemed to him to be as interested and intelligent as those of the Muzaffarpur district.

Bihar—Settlement. 9. The settlement work done in Bihar during the year under review may be summarized as follows:—

In Muzaffarpur the records were attested by the Settlement Officer, Mr. P. C. Lyon, and three Assistants for an area of 66 square miles, comprised in 320 villages with 35,799 tenants. The number of plots is not stated. Draft records were published for 59 square miles. 311 villages. No records were finally published. Eighty-five applications for settlement of fair rents affecting 1,015 tenants were preferred, and 66 affecting 713 tenants were decided. The former rental of these 713 tenants was Rs. 5,138, and their rents as settled amount to Rs. 5,527, an increase of 7·57 per cent. Almost the whole of this increase was given in cases in which the raiyats acknowledged that they had taken up new lands in excess of those settled with them, and agreed to pay a small increase of rent. Under section 106 of the Tenancy Act, 187 cases were decided: and 868 objections were dealt with. The total expenditure in this district has been Rs. 1,92,519, viz., Rs. 34,301 on settlement and the remainder on the survey.

In Champaran the records were attested by the Settlement Officer, Mr. E. G. Colvin, and one Assistant for an area of 41 square miles, 72 villages, 34,340 khasra numbers. In this area 66 applications for settlement of fair rents affecting 4,362 tenants were presented by landlords: 38 of these applications were disposed of, with the result that the rents of 1,385 tenants were raised from Rs. 5,768 to Rs. 5,946, or 3 per cent. In many cases the tenants filed *solehnamas*, agreeing to pay rent at existing rates per bigha for the whole area shown to be in their possession by the survey, on condition of allowance to be made to them at the rate of two cottahs in the bigha to cover differences



of measurement. The cost of the survey in the district from the commencement has been Rs. 1,21,330, and of settlement Rs. 21,732, total Rs. 1,43,062, to which must be added the sum of Rs. 29,947 (or at least a large part of it) advanced by landlords and paid to patwaris and coolies as mentioned in paragraph 7 above. The Board have called for an explanation of the fact that while only 2½ per cent. of the entire body of tenants are non-occupancy raiyats in Muzaffarpur, 43 per cent. of the tenants holding under tenure-holders are non-occupancy raiyats in Champaran, and why it is that the percentage of non-occupancy raiyats under tenure-holders is so much larger than that of those holding under proprietors direct. His Honour would wish to see the explanation furnished by the Settlement Officer in accordance with the Board's orders. The Board also remark that with reference to Rule 23, Chapter VI of the Tenancy Act Rules, and section 35 of that Act, the Settlement Officer should satisfy himself that admissions are in accordance with actual facts. This suggestion seems hardly correct, for section 35 refers to enhancement of rent by suit, not to the question of a raiyat's status; and rule 23 lays down that the raiyat's admission, after the law has been explained to him by the Revenue Officer, shall be accepted.

10. The work done in Orissa during the season of 1892-93 is shown as follows in columns 4 to 15:—

	Total area under survey and record of rights.	Total area under settlement of revenue.	TRAVERSE SURVEY.			CADASTRAL SURVEY.		RECORD-WRITING.		Total cost of cadastral survey and record-writing.	COST PER SQUARE MILE.			Cost of survey and record-writing per acre.
			Number of villages.	Square miles.	Cost.	Number of villages.	Area in square miles.	Number of villages.	Area in square miles.		Traverse survey.	Cadastral survey and record-writing.	Total cost.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Sq. miles.	Sq. miles.	.....	.....	Rs.	.....	.....	.....	.....	Rs.	.....	Rs.	Rs. A. P.	Rs. A. P.
Cuttack	2,325	2,116	.....	.....	3,794*	862	474	1,614	795	1,21,487	.....	150	172 8	.....
Puri	985	985	.....	.....	.....	2,057	1,093	2,042	1,078	1,13,702	.....	103	.....	.....
Balasore	1,697	1,697	2,366	1,074	49,601	.....	.....	.....	.....	.....	47	.....	for Orissa.	.....
Total	5,007	4,798	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

\* For completion of previous year's work.

The survey of Orissa during the last two seasons has been made chiefly by Hindustani amins. The record-writing has been done by Uriyas. Field maps have been made and records written and delivered by the Survey Department as follows:—In Puri, for the whole area under survey, comprising 1,960 villages and 14½ lakhs of plots; in Cuttack, for 2,277 square miles, 4,862 villages and 40½ lakhs of plots; in Balasore, for 1,093 square miles, 2,042 villages and about 26 lakhs of plots. These figures give totals of 4,355 square miles and 8,864 villages, which do not quite coincide with the totals of 4,394 square miles and 8,868 villages mentioned in another passage of the Settlement Report.

The expenditure includes large arrears of the previous season, so that the total cost rate of survey for the Division of Rs. 172-8-0 per square mile compares unfavourably with the rate of 1891-92, which was shown to be Rs. 157 per square mile. The higher rate is attributed to the necessity for completing the traverse records of past seasons before consigning them to the Surveyor-General's office: this work should have been done year by year. The Lieutenant Governor bears in mind, however, that some of the delay and expense of the Orissa survey is due to the inefficiency of a survey officer during the past season, and to the bad work of another who was employed in the earlier stages of the work. These cases, like that of another officer in Champaran, are a warning as to the serious mischief which may be caused by placing an incompetent survey officer in charge of extensive establishments and large operations. Instead of the Hindustani amins employed, the Director of Surveys would have preferred to employ the local Uriyas, who would, he thinks, have worked as cheaply and as well. The Lieutenant-Governor concurs in this opinion. The records were prepared during the year under review in accordance with the following principles, which briefly summarize the new procedure referred to in paragraph 4 above, viz., (a) joint control of Survey and Settlement Officers; (b) the completion of the records, including rents

and status in the first instance, with the exception of the Settlement Officer's personal entries; (c) the responsibility of the Survey Officer for the maps and of the Revenue Officers for the records; (d) the simultaneous preparation of the three records, viz., khasra, khatian and parcha; (e) the revision of the khewat. The want of precise instructions for the record-writing in Orissa until June 1892 was noticed in last year's Resolution, and the orderly system introduced during the year under review was of great advantage to the work. The people displayed no keen interest in the proceedings, and the officers complained of non-attendance. The survey of the towns of Balasore and Cuttack (including the khas mahal lands) and the French possessions in Balasore and the Temple lands in Puri will be of considerable administrative advantage.

11. The settlement was under Mr. W. Maude for the greater part of the year. He succeeded to the post on the death of Mr. H. R. Reily by an accident, and found that he had a heavy task to accomplish before he could introduce accuracy and method into the working of the office and staff. Supervision of the record-writing and attestation of the initial records prepared by the survey establishment have formed the principal work of the year for the Revenue Officers. The outturn of attestation is shown as follows:—

	VILLAGES.		SQUARE MILES.		PLOTS.		TENANTS.	
	In 1892-93.	Up to date.	In 1892-93.	Up to date.	In 1892-93.	Up to date.	In 1892-93.	Up to date.
1	2	3	4	5	6	7	8	9
Cuttack ... ..	963	2,132	431	852'35	794,863	1,679,47	174,566	} Figures not returned.
Puri ... ..	62	1,956	50	983	117,216	1,469,511	20,482	
Balasore ... ..	511	511	127	136'71	269,051	209,951	50,723	
Total ... ..	1,537	4,599	608*	1,972'06	1,120,950	3,357,709	245,771	.....

\* Subsequently reported to be 618 square miles.

No applications for settlement of fair rents were made during the year, and no fair rents were fixed. Mr. R. Nathan, c.s., Assistant Settlement Officer, prepared soil maps and experimental assessment sheets based thereon for a number of villages in the Kotdesh pargana in Puri, and submitted a careful report in which he discussed the proper mode of treatment of different kinds of tenures and rights, and the methods and principles to be followed in the assessment of fair rents. His proposals have recently come under the consideration of Government. On his recent visit to Orissa Sir Charles Elliott made enquiries into the proper principles of reassessment of the land revenue, and has offered some suggestions for the consideration of the Board and the local officers. The cost of the settlement operations, Rs. 1,87,609, distributed over the area attested, about 618 square miles, gives a rate of nearly Rs. 304 per square mile, or about  $7\frac{1}{2}$  annas per acre. The Lieutenant-Governor has reason to be well

1891-92.  
11 officers: each attested 212 villages, 168,807 plots, 64,007 acres, or 100 square miles.

1892-93.  
16 officers: each attested 92 villages, 64,448 plots, 14,469 tenants 22,776 acres, or 36 square miles.

satisfied with the thoroughness of the attestation work done in 1892-93 and since; but from calculations made of the average performances of each Assistant Settlement Officer, he has deduced that the rate of progress was slower than the previous year, and the cost rate, as the Board have pointed out, is excessively high. Progress in attestation has been much hampered in Orissa by the inaccuracy and incompleteness of the records written in 1889-91. The larger outturn of 1891-92 was obtained, it is apprehended, at some sacrifice of thoroughness and accuracy in the attestation work. There is now some danger lest in his praiseworthy desire to obtain accuracy the Settlement Officer should go into the extreme of too much refinement, and of aiming at an unattainable degree of perfection. The Board remark that if the khasras and khatians had been correctly prepared by the Survey Department, much better progress might have been made in attestation at a much lower cost rate. They could hardly have supplied a stronger instance of the evil effects of



the old system and the necessity for the adoption of the new procedure (of amalgamated working) discussed above. Had the khasras and khatians been prepared by both the Survey and Settlement Departments together, they would have been more accurate and the cost would have been lower.

12. The system of procedure in Chittagong has been continued on the lines of the previous year, as it was considered too late to make any changes. The Lieutenant-Governor cannot agree with the tenor of the Board's remarks that it would have been advisable to introduce a new system, in a small portion of the work, at the end of the operations, against the opinions of the local officers. When officers have become habituated to one system, and have established it over some hundreds of square miles, it is not worth while to insist on their adopting unwillingly a new system for the last 150 square miles. It should be remembered how hard it is for officers and their establishment, thoroughly imbued with one system, to change suddenly to another. The outturn and cost rates of the year were as follows:—

TRAVERSE SURVEY.				CADASTRAL SURVEY.			
Number of villages.	Square miles.	Cost.	Rate per square mile.	Number of villages.	Square miles.	Cost.	Rate per square mile.
1	2	3	4	5	6	7	8
		Rs.	Rs. A. P.			Rs.	Rs. A. P.
17	88	1,491	62 6 5	70	159	32,859	206 9 7

The Lieutenant-Governor agrees that the rates of cost for mapping only, without any record-writing, are high; but he understands that they are attributable in some measure to the complications in procedure as well as to the nature of the country. The cadastral and skeleton boundary survey of this district were complete by the end of the year under review.

13. The khasra writing of 155 villages and 410,454 plots was completed by the Settlement Department during the year, the work for 875 villages having been done in previous years. The khatians of 354 villages which remained to be written were completed, so that the initial record-writing of the district was finished for the 1,030 villages surveyed. This work was carried on principally under the eye of the Settlement Officer, Mr. C. G. H. Allen, himself, the attestation work being mainly carried on by his 17 Assistants. During the year records for 532 villages, containing 507,575 khatians and 1,531,437 plots, were attested. At the end of the year records for only 123 villages remained to be attested. The attestation work fell short of the programme by 160,000 fields, but the programme was a high one, requiring every officer to attest 25,000 fields in each month. Still the work done in every branch of settlement duty in Chittagong was larger than in Orissa; seven officers in Chittagong attested records for 15 lakhs, 16 officers in Orissa attested records for 10 lakhs of plots. Each of the seven officers in Chittagong attested records for 76 villages, 72,510 khatians, 218,777 plots. The area is not given, but as the area of 1,048 villages is 1,866 square miles, the area of 532 villages may be taken to be about 1,000 square miles, so that each officer attested records for 135 square miles. To this must be added the case-work and soil maps for 428 villages comprising 411 square miles prepared in the year. Fair rents were settled for 1,041 tenure-holders in Ramu and for 782 tenants in Jaldi and Belgaon. The rents of the former have been increased from Rs. 37,926 to Rs. 46,890, and of the latter from Rs. 15,044 to Rs. 16,813. The case-work of the year comprised 792 boundary disputes, 43,981 objection cases, 1,059 settlements of fair rents, 627 disputes tried as civil suits. The settlement work of the year cost Rs. 1,54,863, making a total expenditure from the beginning of the operations of Rs. 5,21,766 on survey and Rs. 3,85,055 on settlement. Assuming that the attestation work extended over 947 square miles, the cost rate was Rs. 163 per square mile, or annas 4 per acre. But the data are insufficient for accurate calculations. The total cost-rate for the operations in

Chittagong had exceeded 12 annas an acre down to the end of September 1893.

14. The terms of settlement for 2,521 taluks had expired in or before 1892-93; for 4,359 they fell in during 1893-94; for 6,501 they will fall in during the year 1894-95; and for 18,335 they will expire between 1895 and 1898. These figures show the necessity of pressing on the settlement of fair rents as quickly as possible; for already much revenue has been lost by delay. It is much to be regretted, and it is the chief blot on the progress made during the year, that no advance has been made towards the resettlement of the land revenue, either here or in Orissa. A mistake was made originally in Chittagong by giving the assessment of a small tract (the Ramu thana) to an inexperienced assistant. The Lieutenant-Governor visited Chittagong during the winter of 1892-93 with the Hon'ble Mr. Stevens, in order to inspect the settlement work, and specially to look into the assessment proposals for Ramu: it was conceived that most of the difficult questions were disposed of on this occasion, but no orders appear to have issued during the year, and matters appear still to stand where they were. The resettlement of the land revenue is a class of work of which, since the Bengal Tenancy Act was passed, Settlement Officers have necessarily had little opportunity of gaining experience, and it is the more obligatory that the Settlement Officer himself should learn the work and feel his way, and not make it over to a subordinate before he has acquired power to guide him. It is unwise also to concentrate attention on one class of work at a time, and to carry it on by stages over the whole area of operations. Both in Chittagong and in Orissa, attestation and settlement of rents and resettlement of revenue should have been going on simultaneously in different parts of the districts, so that experience might be acquired at leisure and the proper system developed (as is always the case) through many experiments more or less abortive till the right path is struck out.

15. In the Western Duars of Jalpaiguri the survey work was all completed by May 1892, and some mapping only remained to be finished during the year under report. It is unfortunate that the details of the tea land surveys, *i.e.*, of the blocks reserved for future tea cultivation, which have been in progress for some years under the district authorities, could not be utilized for the topographical maps on account of their inaccuracies. In the circumstances, there is no help for it but to leave blank in the large scale maps the topography of the grants, and only to use the materials of the tea survey so far that the tea blocks shall be identifiable and traceable on the professional survey maps. It is desirable that the geographical maps should contain as many of the thana and tahsil boundaries, towns, markets, ferries and other local names as can be inserted. The area under settlement in this tract has been nearly 767 square miles, within which 9,324 revenue-paying jotes have been settled; for 7,891 of these jotes the records had been previously attested, and for the remaining 1,433 they were attested during the year. The Settlement Officer also dealt with 389 jotes on the late Colonel Hidayat Ali's grant, and with 1,000 blocks of khas land. Rate reports were prepared during the year for all the parganas for which rates had not been already sanctioned by Government; the new jamabandi was published for 9,268 jotes out of the 9,324; new leases were issued and kabul-yats taken. The total number of tenants in the area settled is 63,369, of whom 22,802 are adhiars or under-tenants paying rents in kind. It is satisfactory to observe that, in all the 816 cases appealed to the Commissioner, the decision of the Settlement Officer, Mr. D. Sunder, was upheld without exception. The revenue at the last settlement of the four tahsils and one pargana amounted to Rs. 2,33,999; by the new settlement it is Rs. 3,70,316—an increase of Rs. 1,36,317. This increase is chiefly due to the extension of cultivation in the Duars, by which the number of jotes has risen from 6,953 to 9,324. It is also to some extent due to the enhancement of rates in the more advanced parts of the Duars, and to the assessment of revenue-free lands. The facility with which collections are being made show that the settlement rates, while productive of higher revenue, are not excessive. The cost of settlement has been Rs. 1,36,854, and of survey Rs. 3,75,105 up to 30th September 1893, total Rs. 5,11,959, *i.e.*, about Rs. 667½



the square mile, or between a rupee and 17 annas the acre. Mr. Sunder's work has been highly commended by all the revenue authorities, and the Lieutenant-Governor awaits his final report with interest.

16. Survey and settlement operations were carried on during the year under the supervision of the Directors in the Government estates shown in the following statement, which gives particulars of the amount of survey work done and of the cost incurred:—

	TRAVERSE SURVEY.				CADASTRAL SURVEY.			
	Number of villages.	Area in square miles.	Cost.	Cost rate per square mile.	Number of villages.	Area in square miles.	Cost.	Cost rate per square mile.
1	2	3	4	5	6	7	8	9
			Rs.	Rs. A. P.			Rs.	Rs. A. P.
Pataspur estates (Midnapore) ...	92	57	3,823	67 1 7	92	57	7,315	163 4 9
Jaipur estates (Bogra) ...	153	69	4,514	75 3 2	22	13	1,922	147 12 10
Backergunge ...		Survey complete in 1891-92.						
Noakhali churs ...		Ditto in 1891.						
Palamau ...	56	38	1,001	26 8 0				

The cost in the Pataspur estates was high owing to the want of demarcation, the poor work turned out by the Bengali amins, and the expenditure on the minute survey of village sites. The 18 temporarily-settled estates of pargana Pataspur now under resettlement were transferred from Balasore to Midnapore in 1825, and have been settled for short terms since the last regular settlement expired in 1884. Khasras were written during the year for 38 villages completely and partly for 17 more. Khatians were prepared fully for 23 villages and partly for 3 others. Then the Survey establishments were withdrawn, and it was arranged that the Settlement Department should during the following season continue doing the work which it had not been possible to finish. The total estimate of cost of survey and settlement was Rs. 22,313, but the share debitable to the Survey Department was exceeded, and an explanation should be submitted.

The eight Jaipur estates in Bogra and Dinajpur cover an area of 44 square miles, and contain 153 villages. The original estimate for the survey was Rs. 6,900, and the total estimate for survey and settlement was Rs. 11,659; but the total survey expenditure alone is expected to reach Rs. 12,122, or 6 annas 10 pies per acre, and no settlement work was done during the year. The reasons why the programme of work could not be accomplished have been stated to be—delays in starting, inclemency of the weather, want of adequate establishments, scarcity of labour and necessity of importation, the objections made to khanapuri. Some allowance may be made for these difficulties, but some of them might have been foreseen, as the Board observe. It has been, for instance, unfortunately a common practice in Bengal to order and enter upon a survey too late in the season to admit of its being finished before the rains, so that expenditure has been incurred unnecessarily; but the Lieutenant-Governor trusts that there will be no repetition of such a mistake. His Honour is very averse from any of these operations being undertaken or expenditure incurred until all preparations are complete. The Board notice the want of Bengali amins for the Jaipur survey; but the Lieutenant-Governor is aware that the Director of Surveys has always expressed his desire to train and employ local agency, whether Biharis, Bengalies or Uriyas, wherever possible. Amins from the North-Western Provinces were imported to Bogra because there was no time to train local men.

The survey and the initial record-writing in respect of the 17 Government estates in Backergunge, comprising an area of  $82\frac{3}{4}$  square miles under settlement during the year, had been completed before October 1892, and the records had been attested. Rents had been settled in the previous year for 2,735 out of the 6,565 tenants, and for 3,830 tenants were settled during the year. The rental of these 6,565 raiyats of all classes has been raised from Rs. 1,30,933 to Rs. 2,02,191, and the former revenue from Rs. 49,808 to Rs. 1,00,887, an increase of Rs. 51,078. The increased demand is chiefly due

to increased cultivation, more accurate record of the assets, and the increase of revenue is also in part due to the fact that some of the estates have been taken under khas management. During the year Rs. 1,767 were spent on settlement, and the whole cost of the operations is expected to amount to Rs. 47,931, or a rate of  $14\frac{1}{2}$  annas an acre. The Lieutenant-Governor must request that greater attention be paid to the cost of the operations, and that full explanation be submitted when it exceeds 8 annas an acre. He desires to know on what work the Deputy Collector in charge of the settlement is still engaged, and a final report should be submitted to Government.

The two Noakhali chars only comprise an area of 12 square miles, and would, under the recent orders regarding control of smaller settlements, have been left to the Commissioner. The non-professional survey was completed in 1891, and the records were attested and fair rent settled by September 1892. Appeals were then preferred by the tenants to the Special Judge, which had to be decided before final publication of the records could be made; and the final stage of the operations had not been reached in the case of either estate by the end of the year. An increase of revenue has been obtained, but some has already been lost by diluvion, to which such lands are always liable.

The survey-settlement of the Government Palamau Estate of 428 square miles (of which about a quarter is estimated to be cultivated) comprised in 383 villages was undertaken in consequence of the expiry of the thikadari settlement. The increase in cultivation since the last settlement is estimated at 50 per cent., but no estimate of the increase of revenue expected has been furnished to Government. Traverse survey was commenced late in the field season of 1892-93, and 38 square miles were traversed at a cost of Rs. 1,001. It is satisfactory to observe that 65 surveyors had been locally trained and took the field at the close of the year.

17. The extent of the operations undertaken on Wards' estates and the progress made during the year, as well as the cost rate per square mile, will appear from the following statement. The survey in most cases had been previously completed.

	Area under settlement in square miles.	TRAVERSE SURVEY DURING THE YEAR.			SKELETON SURVEY DURING THE YEAR.			CADASTRAL SURVEY DURING THE YEAR.		COST DURING THE YEAR.		
		Area in square miles.	Cost.	Cost per square mile.	Area in square miles.	Cost.	Cost per square mile.	Area in square miles.	Cost.	Survey.	Settlement.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13
			Rs.	Rs. A.P.		Rs.	Rs. A.P.		Rs.	Rs.	Rs.	Rs.
Burdwan Raj Khas Mahals ...	308	126(a)	11,366	90 3 2	783(a)	30,351	38 12 10	...	...	41,717	10,698	...
Talipabad estate ...	71	...	1,902	...	...	...	...	...	6,303	8,205	4,735	12,940
Dakshin Shabazpur estate ...	147	...	...	...	...	...	...	...	...	Nil	13,968	13,968
Sarail ...	277	...	...	...	...	...	...	...	...	...	...	...
Tikari ...	600(b)	271	15,837	58 5 0	...	...	...	...	...	...	...	...
Kujong ...	229	...	...	...	...	...	...	...	...	...	2,285	2,285
Kanika ...	278	...	...	...	...	...	...	...	...	19	4,325	4,344

(a) In addition to the area shown in column 2.

(b) 500, if the area let out in mukarari is excluded.

The Burdwan Raj khas mahals situated in Burdwan, Bankura, Hooghly and Midnapore were under settlement. The settlement of Sujamutha pargana in Midnapore, with an area of nearly 43 square miles, was completed, except one village, in January 1893. The settlement cost Rs. 22,505, and the survey Rs. 16,000, total Rs. 38,505, or Rs. 1-6 an acre. The result has been a decrease of rent of Rs. 4,766. The late Commissioner of the Division recorded his opinion that the "settlement was a fiasco; it cost an enormous sum; it resulted in a heavy decrease of rent, and practically it left untouched those fraudulent tenants who by dint of chicanery had annexed abandoned holdings and held them without payment of rent." The Board have controverted these views on the grounds that there was no real decrease in rent, and that the object of the operations was to clear up confusion and not to enhance rents, and imply that the settlement is thought ill of because Mr. Power is supposed to have held that "the primary and main object of every survey and settlement should be to



enhance rents." The Lieutenant-Governor does not conceive that the Commissioner was actuated by such an impression. It should not be forgotten that Sir Charles Elliott himself inspected the work in Sujamutha, and recorded his condemnation in strong terms of the manner in which it had been effected. Mr. Power was probably quoting from the Lieutenant-Governor's inspection note of 1st March 1891, in which the following words occurred: "If settlements are conducted by officers so untrained and inexperienced, and so unhelpt by their superiors, we must expect fiascos to occur." Sir Charles Elliott is satisfied that Mr. Power's censure is well deserved.

The completion report of the Hukumapur estate was submitted during the year, and reviewed by Government in a Resolution dated the 27th March 1894. Very slow progress was made in the settlement of rents in the Burdwan and Hooghly districts, and no progress was made in the Bankura district during the year. The causes of the slow rate of progress attained have been stated to be (1) the confused state of the rent-rolls hitherto maintained in the Raj offices; (2) the numerous claims made by occupants to hold land rent free which have been resisted, but often unsuccessfully, by the manager; (3) the numerous applications filed by the manager for settlement of fair rents; (4) the incorrectness of the records originally written by the Survey Department; (5) the defects in the system of attestation at first adopted, which was altered during the year under report.

The area of the Talipabad estates under settlement according to the most recent information is 71 square miles, with 117 villages. The operations were undertaken, on the application of the Magistrate of Dacca, to avert disputes between the landlords and tenants. No applications for fair rents have been filed. There is said to be much uncertainty as to existing rents, and those named by the landlords and tenants are apparently often the result of compromises effected for purposes of record in the settlement papers.

In Dakhin Shabazpur, the professional survey was finished in March 1892. The preparation of the record of rights has been difficult owing to the extreme intricacy of the tenures, the same tenant frequently holding several different interests in respect of the same land. Measures were adopted to reduce the number of khatians by amalgamating those relating to land held by a tenant under one interest though under separate landlords, but the result has not saved so much labour as was expected. Attestation and the subsequent settlement operations have been continued during the year. In explanation of the slow progress in the settlement of fair rents, it is stated that time was granted to the Manager to endeavour to come to an amicable arrangement with the raiyats of 11 villages. In the case of 66,736 tenancies the previous rental of Rs. 1,95,227 has been increased by Rs. 9,848. Since the beginning the total cost of survey has been Rs. 41,639, an average cost of 7 annas per acre, and of settlement Rs. 33,834, *i.e.*, an average of annas 5-9 pies per acre.

In the Cossimbazar Ward's estate in Sarail pargana in the Tippera district the survey was completed in 1890-91, and the settlement records were finally published by September 1892. The completion report is believed to have been submitted by the Settlement Officer during the year under report, but has not yet been forwarded to Government. The rental of the estate has been increased from Rs. 2,11,362 to Rs. 2,67,066, *i.e.*, by Rs. 55,704 or 26.3 per cent., of which Rs. 52,069 are said to be due to extended cultivation. Difficulties, however, have been anticipated in the enforcement of the new jamabandi, errors have been discovered in the records, and the Settlement Officer has been sent back, under the Board's orders, to revise his work. The proceedings cost Rs. 1,05,588 for survey, Rs. 47,547 for settlement, *i.e.*, a rate per acre of  $9\frac{1}{2}$  annas in the former case and annas 4-2 pies in the latter.

In the case of the Tikari estate in Gaya, the orders of Government sanctioning the survey were issued on the 1st March, and the traverse survey began in April. By July 1893, when the survey detachment left the field, the traverse of 271 square miles had been completed.

In Kujang in Cuttack the settlement was completed before April 1892. The Board having sanctioned a reduction of the rents settled, the records were revised by the sub-manager, and by the end of the year the revision had been completed, except for one village. The original rent-roll was Rs. 1,01,094: the settlement gave a rent-roll of Rs. 1,09,851: the revised rent-roll amounts to

Rs. 1,03,500, so there still remains an increase of Rs. 2,405 from raiyati lands. The rents settled in the case of invalid lakhiraj tenures and excess lands after revision amount to Rs. 6,473 more. The total cost of the settlement from the beginning has been Rs. 80,267 or at the rate of annas 3-3 per acre, and of survey Rs. 50,648 or at annas 5-6 per acre.

In Kanika, also in Cuttack, the professional survey had been completed before the year under report, with the exception of six new villages, and only those six villages and some extensions of cultivation were surveyed during the year; attestation was finished during the year. The rental of this estate has been increased from Rs. 99,943 to Rs. 1,24,478 in the villages where the work was completed. The increase of rental has chiefly been obtained from increased cultivation, but in some villages rates have been raised. The cost of survey has amounted to Rs. 66,624, or 6 annas an acre; the settlement is expected to cost Rs. 23,027, or 2 annas an acre: so that a considerable increase of rental has been obtained at the cost of 8 annas an acre. The two last-named settlements have not been judicial settlements made under Chapter X of the Tenancy Act, but have been effected by amicable arrangement between the managers and the tenants.

18. Besides the operations in Bihar, some important private estates were under survey and settlement during the year. The area of the estates of the Maharaja of Hill Tippera in Chakla Roshnabad is now stated to be 553·7 square miles. The following work, at the cost stated, was done during the season:—

	Number of villages.	Square miles.	Cost.	Cost rate per square mile.	Cost rate per acre.
1	2	3	4	5	6
Traverse survey ...	1,077	404	Rs. 29,963	Rs. A. P. 62 11 2	A. P. 1 6
Cadastral „ ...	742	289	64,960	259 14 5	6 6

The number of square miles represents the area in each case of the actual traverse and cadastral survey, but the cost rates are the aggregate of the rates obtained by dividing the cost of each head of the work (including demarcation, record-writing, &c.) by the area of that particular head. The cost was increased by the high rate of wages of local labour, the difficulty in procuring it, and the high freight for station marks. The traverse survey of the estate has been finished, and more than half the cadastral survey. The initial records were written for 205 square miles.

The difficulties experienced in the record-writing have been great. The tenures are complicated, and the Maharaja's staff have very little information as to the areas occupied by the various talukdars and tenure-holders who pay rent to His Highness. The weather also was inclement in April and May 1893. The Survey Officers stayed in the field until the 11th July 1892, which was very creditable to their sense of duty. The Lieutenant-Governor does not wish officers and their establishments to be exposed to climatic discomfort so late in the year. In this case the survey detachment had been delayed in coming from Chittagong, and wished to complete their programme before going into recess. No attestation work was done, as the Settlement Officer's whole time was employed in supervising the difficult record-writing and settling disputes. The work was undoubtedly very difficult for the officer first appointed to it, Babu Kali Sankar Sen. He has since been succeeded by a Statutory Civilian, Mr. Barada Charan Mitra, who had had two years' experience in the Orissa settlement. But the difficulties have still not been overcome. It is understood that only a very small amount of attestation work has been done even up to the present time: the delay will have to be fully explained. The total cost incurred on the operations up to the end of the year was Rs. 1,11,162.



The survey of the Mollarpur estate in the Birbhum district, consisting of 38 villages with an area of 35 square miles, was ordered in November 1889, to put a stop to the disputes between Mahant Gopal Das and his raiyats. The survey was carried out in 1890 and 1891, and the records were attested before September 1892. Case work was the principal occupation during the year of the Settlement Officer, Munshi Nandji (who was also employed as an Assistant Settlement Officer during the field season in the Muzaffarpur district). Fair rents were settled for 3,103 raiyats, their former rental being raised from Rs. 39,447 to Rs. 43,478, or by 10·21 per cent.; the increase being obtained, not by enhancement of rates, but by the assessment of excess lands found in possession of the tenants. The proceedings were characterized by protracted litigation between the Mahant and his tenants. The whole cost has been Rs. 30,493, or at the rate of Rs 1·5 an acre. The final report of this settlement should be submitted to Government without further delay.

The Ulania taluks in Backergunge, in 31 villages and comprising 17 square miles, were brought under survey and settlement on the application of the patnidars and darpatnidars. It appears that much of the traverse and cadastral survey was carried out between April and September 1892, and the Lieutenant-Governor is constrained to remark that, unless there is some special reason for making a commencement, this is not the proper season of the year for doing such work. The survey and initial record-writing were finished during 1892-93, and considerable progress was made with the attestation. Applications for settlement of fair rents were disposed of in 108 cases, and the existing rents raised from Rs. 2,281 to Rs. 3,051, or by about 33 per cent. The total cost of the operations is likely to be very high in consequence of the strained relations between the landholders and the tenants.

In the Sonthal Parganas, the survey and settlement of 548 villages, in 23 parganas and taluks, covering 391 square miles, were undertaken on the application of the zamindars. The operations were entirely conducted by Mr. J. A. Craven with the help of two Assistant Settlement Officers. The whole area was surveyed in the field season of 1892-93, and attestation was completed in October 1893 for all the villages. The rental of Rs. 78,009 was raised to Rs. 1,11,367; a large enhancement. In all the 5,964 cases of various descriptions there were no appeals: and all were disposed of within the year. The operations were conducted with remarkable despatch, and cost Rs. 73,951, *i.e.*, Rs. 189 the square mile, or less than 5 annas an acre.

19. The Director of Land Records has summarised the information available as to the extent to which settlement records recently framed have been maintained and corrected, as to how far the settlement khatians have been adopted as the working rent-rolls for collecting rents, and as to the value attached to the settlement records by the Courts. It is evident that, where estates were settled while under the Court of Wards, little or nothing has been done since their release to record mutations of tenures and holdings. On a recent enquiry it appeared that no real attempt had been made to maintain the settlement records and correct the maps in the Srinagar-Banaili estates, although definite rules had been issued for the purpose. Further suggestions have been made to the Managers of the estates, though in such cases it is not open to Government to interfere effectively. But it is satisfactory to hear that in some cases, such as, for instance, in the area of the Muzaffarpur experimental survey of 1885-86, the Sankarpur, Churaman and Maldwar estates, the Dubalhati Raj estate, the Srinagar-Banaili estate, and the Hukumapur property of the Burdwan Raj, the settlement khatians have been adopted by the landlords for the most part as the working jamabandi for the collection of rents. In the area surveyed in Muzaffarpur in 1885-86, nothing has been done to keep the settlement records up to date; but the Officiating Lieutenant-Governor, Sir A. P. MacDonnell, drew special attention in one of his Minutes to the fact reported to him that the Civil Courts have invariably decreed rents in the surveyed area in accordance with the record of rights prepared by Mr. Collin, except in a very few instances in which the raiyats, when sued for higher rents, admitted the claims of the plaintiff. The Board write that such measures as are practicable are being taken to keep the records corrected in estates under the direct management of Government, and the Lieutenant-Governor is aware of the correspondence

which has passed with regard to Angul and Banki, which were recently surveyed and settled, though not under the Tenancy Act. But he is not at all satisfied, since the unsatisfactory operation of the rules issued in November 1892 for the maintenance of the records in Khurda lately came to his notice, that really effective measures have been adopted in Government estates which have come under survey and settlement, and he must ask the Board again to take up the case of each of the important estates separately, and ascertain whether further orders are required, and what is necessary to ensure compliance with rules. From the value attached to the settlement papers of 50 and 60 years ago in Chittagong and Orissa, His Honour is fully convinced of the advantages of settlement proceedings, even though no provision is made for the maintenance of the records; but the importance of the annual record of mutations was prominently brought out in the Calcutta Conference of last cold weather on the maintenance of records, and there can be no question that the settlement proceedings are the more useful the better they are maintained up to date. It is unnecessary at present to make any observations on the question of the compulsory maintenance of records in private estates brought under survey and settlement, as a Bill for the purpose is known to be under the consideration of the Government of India and the Secretary of State.

20. The Lieutenant-Governor has again to record his very high appreciation of the services rendered to Government by Colonel Sandeman and Mr. W. C. Macpherson, c.s., as Directors of Bengal Surveys and Land Records throughout the year 1892-93. They have fully deserved the encomium on their great industry, enthusiasm and harmonious co-operation expressed by the Board. His Honour is aware of the arduous nature of their duties, of the range and importance of their charges, and of the energy with which they have guided the extensive operations under their supervision. He notes with pleasure the names of the officers mentioned by the two Directors, and selects the following Settlement and Survey Officers as specially deserving of thanks for their good work during the year:—

*Settlement Officers.*

Mr. C. G. H. Allen	...	...	Chittagong.
„ E. G. Colvin	...	...	Champaran and Saran.
„ P. C. Lyon	...	...	Muzaffarpur.
„ W. Maude	...	...	Orissa.
„ D. Sunder	...	...	Western Duars.

*Survey Officers.*

Lieutenant R. Crichton	...	...	Orissa.
Captain G. B. Hodgson	...	...	Bihar.

Sir Charles Elliot also desires to express his obligations to Mr. T. M. Gibbon, C.I.E., Sir W. B. Hudson, K.C.I.E., Mr. E. Macnaghten, Mr. C. W. McMinn, and the numerous civil officers, managers, planters and zamindars, who have in various capacities and degrees rendered assistance to the officers and establishments in charge of the survey and settlement operations in progress throughout Bengal.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

*Secretary to the Government of Bengal.*



LIBERALITY OF THE LATE BABU BHUDEB MOOKERJEA, C.I.E.,  
LATE INSPECTOR OF SCHOOLS IN BENGAL, IN CREATING A  
MUNIFICENT TRUST FOR THE PROMOTION OF SANSKRIT  
LEARNING AND OTHER CHARITABLE OBJECTS IN THE  
PROVINCE OF BENGAL.

No. 40T.G., dated Calcutta, the 31st May 1894.

From—C. E. BUCKLAND, Esq., Secy. to the Govt. of Bengal, General Dept.,  
To—The Director of Public Instruction, Bengal.

I AM directed to acknowledge the receipt of your letter No. 2176, dated the 2nd April 1894, reporting the creation by the late Babu Bhudeb Mookerjea, C.I.E., for many years Inspector of Schools, Bengal, of a trust consisting of (1) debentures to the value of Rs. 1,50,000, yielding interest to the amount of Rs. 8,000 a year, (2) the Budhoday Printing Press, and (3) the *Education Gazette*, for the promotion of Sanskrit and for other charitable objects in the province of Bengal.

2. The Lieutenant-Governor has much pleasure in acknowledging the munificence of the Trust emanating from an old and distinguished servant of Government, and he regrets that the donor's death occurred before his liberality and public spirit received this recognition from Government.

3. The correspondence will now be published in the *Calcutta Gazette*, and a copy should be forwarded to the sons of the donor for their information.

No. 2176, dated Calcutta, the 2nd April 1894.

From—SIR ALFRED CROFT, K.C.I.E., Director of Public Instruction, Bengal,  
To—The Secretary to the Government of Bengal, General Department.

I HAVE the honour to report, for the information of Government, the creation by Babu Bhudeb Mookerjea, C.I.E., late Inspector of Schools in Bengal, of a munificent trust for the promotion of Sanskrit learning and other charitable objects in the province of Bengal.

2. From the trust-deed executed by Babu Bhudeb Mookerjea, a copy of which, together with its translation I enclose, it will be seen that the donor has transferred to the hands of trustees (1) debentures to the value of Rs. 1,50,000, now yielding interest to the amount of Rs. 8,000 a year, (2) the Budhoday Printing Press, and (3) the *Education Gazette*, from the income of the debentures or of any other investment into which they may afterwards be converted, one fifth is to be reserved annually for investment and addition to the fund. The remaining four-fifths, or Rs. 6,400 a year, are to be devoted to the following objects:—

(1) The maintenance of the Biswanath Chatuspathi, a Sanskrit school established at Chinsura by the donor in memory of his father, with a teacher on Rs. 20 a month at least, and not less than five students at Rs. 30 a year each—in all a minimum annual sum of Rs. 390.

(2) The maintenance of the Brahmanoy Bhesajaly, a charitable dispensary established by the donor in memory of his mother, with a Homœopathic Doctor on a salary of not less than Rs. 10 and an Ayurvedic Doctor on a salary of not less than Rs. 10, together with an allowance of Rs. 250 a year for medicines—in all an annual expenditure of Rs. 490.

(3) With the income of the printing press and, if necessary, a further sum of Rs. 300 a year from the fund, Sanskrit works are to be published and distributed.

(4) The *Education Gazette* is to be maintained on its present lines so long as it receives a grant from Government or sufficient support from the public; and it may be assisted, if necessary, by a further grant up to Rs. 800 from the fund.

(5) Provision is made for establishment charges and for the salary of a Superintendent; the cost under each of these heads not to exceed 5 per cent. of the income of the fund, or up to a maximum of Rs. 640 a year.

3. These quasi-fixed charges amount to a maximum of Rs. 2,620 a year. The remainder, or not less than Rs. 3,780 a year, is to be devoted to the payment of stipends to selected teachers of *sruti*, *smriti* or *darsan* at the rate of not less than Rs. 50 a year each, and to selected students of the same subjects at the rate of not less than Rs. 30 a year each. The teachers and students are to be selected as a rule from all parts of Bengal, Bihar, and Orissa, but students from other parts of India may be admitted to the benefits of the trust if found deserving; and special preference is to be given to those who intend to study the Vedanta at Benares, Nasik or other places famous for that branch of Sanskrit learning. It will be seen from paragraph 21 of the trust-deed that, in the event of failure of the trustees, the donor expresses a hope that the Local Government may take possession of the Trust Fund and carry out the conditions of the trust.

4. I have thought it right to bring this munificent trust for the promotion of Sanskrit learning to the notice of the Government in the hope that some public recognition may be accorded to its founder. After an honourable and distinguished career in the service of Government, Babu Bhudeb Mookerjea, who now, I regret to say, lies in a very precarious state of health, has devoted his private fortune to an object of public interest and utility; in the furtherance of which the Government also has closely interested itself. It will be a pride and satisfaction to the donor to know that his liberality and self-denial have met with the approval of the Government whom for the best years of his life he so faithfully served.

## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 2nd June, 1894.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
<b>BENGAL.</b>			
<b>BURDWAN DIV.</b>	1 Burdwan June 2, '94	0.86	Weather—hot. More rain wanted. Supply of fodder sufficient; that of water diminishing. Condition of cattle good. Prices of common rice:— Srs. Burdwan ... 14 to 17 Kalna ... 10 to 14 Katwa ... 14 3/8 Raniganj ... 15 } per rupee.
	Kalna ...	0.08	
	Katwa ...	0.75	
	Raniganj ...	Nil	
	2 Birbhum " 2, '94	Nil	Weather—extremely hot during first part of the week, but cooler for the last three days with east winds. <i>Til</i> doing fairly. Sugarcane being planted and ploughing going on, but rain much wanted. Common rice sells at 14 to 16 seers per rupee in the Sadar subdivision and at 15 to 18½ seers per rupee in the Rampur Hát subdivision. Cattle get fodder.
	Rampur Hát ...	Nil	
	3 Bankura " 2, '94	Nil	Weather—extremely hot in the early part of the week; somewhat cooler latterly. Rain urgently needed for cultivation. Water said to be running short in places. Price of coarse rice normal as below:— Srs. c. Bankura ... 17 3/4 } per rupee. Vishnupur ... 13 4 }
	4 Midnapore " 2, '94	Nil	Weather—very hot. Agricultural work almost at a standstill for want of rain. Indigo not prosperous. Sugarcane hopeful. Prices of common rice:— Srs. Sadar ... 14 Contai ... 16 Tamluk ... Not reported. Ghatal ... 14 to 15 } per rupee.
	5 Hooghly " 2, '94	0.78	Weather—cooler towards the end of the week. The rain has done much good. More, however, still required for <i>aus</i> and jute. In Jahanabad cultivation has been nearly stopped for want of rain. Fodder and water sufficient. Prices of common rice:— Srs. Sadar ... 13 Serampore ... 11½ to 13 } per rupee. Jahanabad ... 14 to 15 }
	Serampore ...	1.67	
	Jahanabad ...	Nil	
	6 Howrah " 2, '94	0.49	Weather—cool and cloudy. The rain has helped the rice and jute sowings. Price of common rice normal:— Srs. Ulubaria ... 12 to 13½ } per rupee. Howrah ... 10 }
	Ulubaria ...	0.17	
			Fodder and water-supply sufficient.
	7 24-Pargannas " 2, '94	0.40	Weather—seasonable. Rain has done good to the <i>aus</i> and jute seedlings. Condition of cattle good. Fodder and water sufficient. Rice sells at— Srs. c. Sadar ... 11 to 14 0 Barasat ... 11 14 Basirhat ... 13 0 } per rupee. Diamond Harbour ... 13 4 }
<b>PRESIDENCY DIV.</b>	8 Nadia " 2, '94	0.60	Weather—cloudy and fairly cool. State and prospects of crops good. Rice selling at 12 to 12½ seers per rupee. Slight outbreak of cattle-disease reported.
	Kushtia ...	3.02	
	Meherpur ...	0.89	
	Chudanga ...	0.86	
	Ranaghat ...	0.65	
	9 Murshidabad " 2, '94	0.21	Weather—hot and cloudy. Rain very much wanted. Cultivation of <i>aman</i> paddy and planting of sugarcane are going on in Kandi subdivision. Sowing of <i>bhadai</i> continues under very unfavourable conditions. Fodder is available for cattle. No cattle-disease reported. Prices continue normal. Common rice sells at 13 seers per rupee.
	10 Jessore " 2, '94	5.92	Weather—hot with high wind and occasional clouds and showers. The rainfall of the week has been beneficial to the ploughing and sowing. Fodder and water for cattle sufficient except in Jhenida. Prices of common rice as below:— Srs. c. Sadar ... 13 0 Jhenida ... 12 0 Magura ... 12 0 Narail ... 13 5 Bangaon ... 10 to 13 0 } per rupee.
	Jhenida ...	1.26	
	Magura ...	0.38	
	Narail ...	1.68	
	Bangaon ...	0.48	
	11 Khulna " 2, '94	0.58	Weather—cloudy and hot with slight rain. Cultivation of rice, jute and <i>til</i> going on. More rain wanted. Price of rice 11 seers 6 chitaks to 14 seers 6 chitaks per rupee. Fodder sufficient. Water scarce at Satkhira.
	Bagerhat ...	0.72	
	Satkhira ...	1.70	



No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concl'd.			
RAJBHARI DIV.	12 Rajshahi Nator Naugaon	June 2, '94 ... ... 0·11 1·01 Nil	Weather—hot and seasonable. Some rain has fallen, but much more is wanted. The crops are getting on fairly well. Water and fodder supply ample. There is no cattle-disease. Price of rice varies from 11½ to 15 seers per rupee.
	13 Dinajpur Thakurgaon	" 2, '94 ... 0·16 Nil	Weather—occasionally cloudy and hot during midday. Sowing of <i>bhadoi</i> is over. Cultivation of <i>haimanti</i> has begun. Rain much wanted. No outbreak of cattle-disease. Fodder and drinking water sufficient. Rice selling from 13 to 15 seers per rupee.
	14 Jalpaiguri	" 2, '94 0·12	Weather—hot. Sowing of <i>bhadoi</i> completed. Prospects of jute good. Common rice sells at 12½ seers per rupee. Fodder and water-supply sufficient. No cattle-disease reported.
	15 Darjeeling Siliguri	" 2, '94 ... 0·73 0·29	Weather—seasonable in the Hills: hot in the Terai. <i>In the hills</i> :— <i>Bhutta</i> , <i>phaphur</i> and potatoes in blossom. <i>Shama</i> and <i>kangni</i> doing well. Seedlings being preserved for transplantation of <i>aghani</i> . <i>Bara marua</i> being sown. <i>In the Terai</i> :— <i>Bhadoi</i> and jute doing well. <i>Haimanti</i> paddy being sown in nurseries. Prices of coarse rice:— <div style="display: flex; justify-content: center; align-items: center;"> <div style="margin-right: 10px;"> Hills Terai </div> <div style="margin-right: 10px;"> ... ... </div> <div style="margin-right: 10px;"> ... ... </div> <div style="margin-right: 10px;"> ... ... </div> <div> Srs. 7 to 12 13 to 14 } per rupee. </div> </div>
	16 Rangpur Nilphamari Kurigaon Gaibanda	" 2, '94 ... ... Nil 0·06 1·47 0·20	Weather—hot and cloudy. <i>Aus</i> paddy and jute are being weeded; prospects continue favourable. Common rice sells at 10 to 14 seers per rupee.
	17 Bogra Sherpur Naukhila	" 2, '94 ... ... 0·42 1·34 0·91	Weather—seasonable. <i>Aus</i> and jute doing well. Rain still wanted. Common rice selling at 14½ seers per rupee. Fodder and water sufficient.
	18 Pabna	" 2, '94 2·7	Weather—cloudy and partially rainy and stormy. The rainfall has done good to the standing crops. Common rice sells at 10 to 13 seers per rupee in the Sirajganj subdivision and 12 seers per rupee in the Sadar subdivision. Fodder and water-supply sufficient.
	19 Dacca	" 2, '94 1·37	Weather—cloudy and rainy with high wind. Jute and rice plants doing well. Rain has done good to standing crops. Common rice selling from 8 to 10 seers per rupee. Fodder available. There is want of drinking water in many places. A few cattle died of small-pox in the Munshigunj subdivision.
Dacca DIV.	20 Mymensingh	" 2, '94 1·61	High south-easterly winds with showers. State and prospects of crops good. The river is rising. Common rice sells at 10½ seers per rupee. Condition of cattle good. Fodder and water available.
	21 Faridpur Goalundo Madaripur	" 2, '94 ... ... 1·44 Nil 0·58	Weather—hot. Sowing of <i>aman</i> and <i>aus</i> paddy finished. Prospects of jute and sugarcane fair. Common rice sells at— <div style="display: flex; justify-content: center; align-items: center;"> <div style="margin-right: 10px;"> Sadar Madaripur Goalundo </div> <div style="margin-right: 10px;"> ... ... ... </div> <div style="margin-right: 10px;"> ... ... ... </div> <div style="margin-right: 10px;"> ... ... ... </div> <div> Srs. 12 12 13 } per rupee. </div> </div> Condition of cattle good. Fodder and water for cattle sufficient. No want of water for drinking and domestic purposes.
	22 Backergunge Pirojur Patuakhali Bhola	" 2, '94 ... ... 3·82 1·51 1·76 1·12	Weather—seasonable. State and prospects of crops fair. Ordinary rice sells from 10 to 12 seers per rupee. Fodder and water sufficient, but drinking water tanks are required in some parts of the Pirojur and Patuakhali subdivisions.
CHITTAGONG DIV.	23 Tippera	" 2, '94 4·12	Weather—seasonable. Late rain has done much good to the standing crops which are progressing very well. Small quantities of <i>aus</i> are being reaped in some parts of Brahmanbaria subdivision. Rice sells at— <div style="display: flex; justify-content: center; align-items: center;"> <div style="margin-right: 10px;"> Sadar Brahmanbaria Chandpur </div> <div style="margin-right: 10px;"> ... ... ... </div> <div style="margin-right: 10px;"> ... ... ... </div> <div style="margin-right: 10px;"> ... ... ... </div> <div> Srs. 9½ to 12 8½ to 11½ 10 } per rupee. </div> </div>
	24 Noakhali	" 2, '94 3·83	Weather—seasonable. A strong gale passed over the town on 28th May. State of <i>aus</i> crop good. Sowing of <i>aman</i> commenced. No cattle-disease. Fodder and water sufficient. Common rice selling at— <div style="display: flex; justify-content: center; align-items: center;"> <div style="margin-right: 10px;"> Head-quarters Fenny </div> <div style="margin-right: 10px;"> ... ... </div> <div style="margin-right: 10px;"> ... ... </div> <div> Srs. 10½ 10½ } per rupee. </div> </div>
	25 Chittagong	" 2, '94 5·18	Weather—cloudy with high winds and occasional sunshine. Ploughing and early sowings in progress. Prospects of crops good. Prices have slightly risen. Water and fodder sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
26	Patna June 2, '94	Nil	Weather—very hot; cloudy for a few hours yesterday (1st June). Ploughing going on, but rain urgently needed. Prices continue normal. Common rice sells at—
	Barh ...	Nil	
	Dinapore ...	0.15	
			<div style="display: flex; justify-content: flex-end; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div>Srs.</div> <div>14½</div> <div>13</div> <div>15½</div> </div> <div style="margin: 0 10px;">} per rupee.</div> </div> <p>Fodder and water for cattle sufficient.</p>
27	Gaya „ 2, '94	Nil	Weather—extremely hot with east wind during most of the week. Sugarcane and <i>cheena</i> (millet) doing well. Rain wanted for <i>bhadoi</i> preparations. Prices above the normal and, on the whole, higher than before. Prices of common rice:—
	Jahanabad ...	0.09	
	Aurangabad ...	Nil	
	Nawada ...	1.1	
			<div style="display: flex; justify-content: flex-end; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div>Srs.</div> <div>13</div> <div>14½</div> <div>14</div> <div>17</div> </div> <div style="margin: 0 10px;">} per rupee.</div> </div> <p>Water and fodder supply not quite sufficient.</p>
28	Shahabad „ 2, '94	0.30	Weather—hot throughout the district. Prospects of sugarcane and <i>cheena</i> good.
29	Saran „ 2, '94	0.06	Weather—less hot than last week. East wind blowing; occasionally cloudy. Heat injuring standing crops, especially indigo. Rain wanted. Fodder and water plentiful. Prices of common rice:—
	Siwan ...	Nil	
	Gopalganj ...	Nil	
			<div style="display: flex; justify-content: flex-end; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div>Srs. c.</div> <div>13 0</div> <div>13 4</div> <div>13 14</div> </div> <div style="margin: 0 10px;">} per rupee.</div> </div>
30	Champaran „ 2, '94	1.12	Weather—very hot in earlier part of week; last three days cooler. Sowing of rice and <i>bhadoi</i> crops for seedlings recommenced. State of indigo improved by the rain of the week. Prospects good. Common rice selling at 14½ seers per rupee.
31	Muzaffarpur „ 2, '94	0.10	Weather—hot with east wind; cloudy on 31st May. Rainfall too small to be of use to standing crops. Rain wanted for all agricultural purposes. Fodder and water sufficient. No cattle-disease. Prices continue normal. Rice selling at 13 seers per rupee.
	Hajipur ...	Nil	
	Sitamarhi ...	Nil	
32	Darbhanga „ 2, '94	0.29	Weather—latter part of the week occasionally cloudy. Paddy, <i>mung</i> , <i>cheena</i> and indigo doing fairly well. Rain urgently wanted both for the standing crops and for preparation of lands for <i>bhadoi</i> crops. Fodder and water for cattle sufficient. Price of common rice ranges from 13 to 14 seers per rupee.
33	Monghyr „ 2, '94	Nil	Weather—very hot with east wind mostly. Sky sometimes overcast with specks of cloud during the latter part of the week. Land is being prepared for <i>bhadoi</i> crops. Indigo and sugarcane doing well. No want of fodder and water. Prices of common rice:—
	Begusarai ...	Nil	
	Jamui ...	Nil	
			<div style="display: flex; justify-content: flex-end; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div>Srs.</div> <div>11 to 15</div> <div>15</div> <div>15½</div> </div> <div style="margin: 0 10px;">} per rupee.</div> </div>
34	Bhagalpur „ 2, '94	0.01	Weather—hot. The only standing crop is indigo, the prospect of which is said to be good. Rain badly wanted for sowing of <i>bhadoi</i> crops. Prices normal. Price of common rice about 16 seers per rupee. Fodder and water sufficient.
	Banka ...	Nil	
	Madhupura ...	Nil	
	Supul ...	Nil	
35	Purnea „ 2, '94	1.10	Weather—seasonable. Slight rain at Sadar last night and also on another day. Weeding of <i>bhadoi</i> and jute going on. More rain wanted. No cattle-disease. Fodder and water sufficient. Price of rice 13 to 18 seers per rupee.
	Kishanganj ...	Nil	
	Araria ...	Nil	



No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.															
BIHAR—concl'd.																		
BHAGALPUR DIVN.—concl'd.	36 Malda June 2, '94	0.04	Weather—hot and oppressive. Harvesting of <i>boro</i> rice continues; 14 annas outturn expected. Rain urgently wanted for the standing crops which are all withering for want of moisture. Ordinary rice selling at 14 to 18½ seers per rupee. No want of fodder or drinking water.															
	37 Sonthal Parganas „ 2, '94	0.38	Weather—cool with the little rain that has fallen. No crops. Lands being prepared for sowing. Rice selling at 12 to 16 seers per rupee. Fodder and water sufficient.															
	Deoghur ...	Nil																
	Godda ...	Nil																
	Jamtara ...	Nil																
	Pakur ...	2.19																
Rajmahal ...	Nil																	
ORISSA.																		
ORISSA DIVN.	38 Cuttack „ 2, '94	0.90	Weather—hot. Sugarcane growing. There having been more or less general rain, <i>sarad</i> and <i>beali</i> lands are being ploughed. Sowing of rice has commenced in places and the markets are better supplied. Average price of common rice :—															
			<table><tr><td></td><td>Srs. c.</td><td>Srs. c.</td></tr><tr><td>Sadar</td><td>... 10</td><td>8 to 13 2</td></tr><tr><td>Jajpur</td><td>... 10</td><td>8 to 13 2</td></tr><tr><td>Kendrapara</td><td>... 11</td><td>4 to 15 0</td></tr><tr><td>Banki</td><td>...</td><td>15 12</td></tr></table> } per rupee.		Srs. c.	Srs. c.	Sadar	... 10	8 to 13 2	Jajpur	... 10	8 to 13 2	Kendrapara	... 11	4 to 15 0	Banki	...	15 12
		Srs. c.	Srs. c.															
	Sadar	... 10	8 to 13 2															
Jajpur	... 10	8 to 13 2																
Kendrapara	... 11	4 to 15 0																
Banki	...	15 12																
39 Balasore „ 2, '94	0.22	Weather—hot with south wind early in the week; cloudy and close for the last three days. A thunderstorm and slight rain on 1st June. Rain wanted everywhere for ploughing and sowing. Sugarcane reported to be thriving well. Price of common rice steady—																
		<table><tr><td></td><td>Srs.</td></tr><tr><td>Balasore</td><td>... 16</td></tr><tr><td>Bhadrak</td><td>... 14</td></tr></table> } per rupee.		Srs.	Balasore	... 16	Bhadrak	... 14										
	Srs.																	
Balasore	... 16																	
Bhadrak	... 14																	
40 Puri May 31, '94	Nil	Water for cattle deficient in some parts. Weather—hot. Ploughing for the next rice crop is retarded for lack of rain. In places sowing going on. <i>Dalua</i> rice is being cut. Sugarcane, cotton and <i>saru</i> thriving well. Common rice sells from 14 seers 7 chitaks to 17 seers 1 chitak per rupee. Mouth-disease among cattle reported from some parts of the district.																
CHOTA NAGPUR.																		
South-West Frontier Agency.																		
CHOTA NAGPUR DIVN.	41 Hazaribagh June 2, '94	0.18	Weather—fine and very hot. Sugarcane doing well. Sowings of <i>marua</i> , &c., in seedling beds continue in places. Rain urgently wanted for ploughing. Fodder and water scanty in places. Common rice sells at 12 to 14 seers per rupee.															
	Giridi ...	Nil																
	42 Lohardaga „ 2, '94	0.22	Weather—very hot. More rain wanted for sowing both lowland and upland paddy. Common rice selling at 14 seers per rupee. Fodder and water sufficient.															
	43 Palamau „ 1, '94	Nil	Weather—very hot. East wind for the last day or two; previously very hot west wind. Preparations for cotton and <i>til</i> sowings going on. Fodder and water-supply short as usual at this time of the year. Rice selling at 13 seers 1 chitak to 18 seers per rupee.															
	44 Manbhum „ 2, '94	Nil	Weather—hot. Variable winds during the last three days. Rain very badly wanted. Cultivation of lands cannot begin till rain falls. Water-supply deficient in some parts. Price of common rice 12 to 14 seers per rupee.															
Gobindpur ...	Nil																	
45 Singhbhum „ 2, '94	80.7	Weather—much cooler at the end of the week. Sugarcane doing well.																

Published for general information.

CALCUTTA; REVENUE DEPT.,  
The 5th June 1894.

C. E. BUCKLAND,  
Secy. to the Govt. Bengal.

## PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN																	
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM ( <i>Sorghum Vulgare.</i> )					
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
BENGAL.																			
BURDWAN DIVISION.	1	Burdwan	16 0	13 8	11 1 $\frac{1}{2}$	...	...	...	12 0	12 0	10 0	15 0	15 0	12 0	...	...	...		
	2	Birbhum	13 8	13 8	12 0	...	...	...	12 0	12 0	10 8	15 0	16 8	12 12	...	...	...		
	3	Bankura	14 9	16 0	13 5	...	...	...	12 8	12 8	10 0	15 14 $\frac{1}{2}$	16 5	10 14	...	...	...		
	4	Midnapore	12 0	12 0	11 0	...	...	...	12 0	12 10	10 0	14 0	15 0	11 5	...	...	...		
	5	Hooghly	14 6	14 6	11 13	20 8	20 8	...	8 0	8 0	8 0	12 0	12 0	10 0	...	...	...		
	6	Howrah	...	...	...	...	...	...	10 0	10 0	9 5	12 5	12 10	11 8	...	...	...		
PRESIDENCY DIVISION.	7	24-Parganas	13 8	13 4	12 0	16 8	16 0	18 0	8 0	8 0	8 0	13 0	13 0	12 0	...	...	...		
	8	Calcutta	12 10	13 0	13 4	20 0	17 12	17 12	7 7	7 8	8 8	10 0	10 2	10 10	17 12	17 12	20 0		
	9	Nadia	18 8	17 13	13 14	22 8	22 13	22 12	6 8	7 9	9 0	12 12 $\frac{1}{2}$	13 5	11 0	...	...	...		
	10	Murshidabad	16 0	16 0	13 0	...	...	...	10 0	10 0	10 0	13 0	13 0	11 8	...	...	...		
	11	Jessore	11 0	12 4	11 4	...	...	...	10 0	10 0	10 0	13 0	13 0	12 0	...	...	...		
	12	Khulna	...	...	...	...	...	...	11 0	11 0	10 10	13 0	12 8	12 14	...	...	...		
RAJSHAH DIVISION.	13	Rajshahi	16 8	16 8	14 4	24 0	24 0	24 0	11 4	11 4	9 12	12 12	12 6	10 14	...	...	...		
	14	Dinaipur	13 9	14 6	14 3	...	20 0	20 0	11 4	12 0	9 14	14 5	14 6	10 12	...	...	...		
	15	Jalpaiguri	12 8	13 0	11 0	13 8	13 0	13 0	8 8	8 8	9 8	12 8	18 0	12 0	...	...	...		
	16	Darjeeling	8 0	8 0	9 0	9 0	9 0	10 0	5 0	5 0	5 0	11 0	11 0	10 0	...	...	...		
	17	Rangpur	15 0	13 0	12 0	...	...	...	8 9	8 5	8 14	13 13	12 8	11 0	...	...	...		
	18	Bogra	16 14	15 0	12 0	...	...	...	10 8	13 8	9 0	13 8	14 4	12 0	...	...	...		
DACCA DIVISION.	19	Pabna	20 4	20 4	18 0	22 8	23 4	24 0	6 2	6 2	6 0	12 0	12 6	11 4	...	...	...		
	20	Dacca	13 0	13 0	12 0	...	...	...	8 0	10 0	10 0	9 12	11 0	10 8	...	...	...		
	21	Mymensingh	9 8	9 8	9 8	...	...	...	10 0	10 0	10 0	11 0	11 0	11 0	...	...	...		
	22	Faridpur	16 8	18 4	17 0	20 0	19 0	20 0	7 4	7 4	7 0	12 0	12 4	10 0	...	...	...		
	23	Backergunge	...	...	...	...	...	...	9 12	10 0	9 9	10 0	10 12	10 0	...	...	...		

A In the subdivisions the retail prices of salt per rupee are:—Kalna 10 seers, Katwa 11 seers, and Raniganj 10 $\frac{1}{2}$  seers.

B At Rampur Hât the retail price of salt is 11 seers per rupee.

C At Vishnupur the retail price of salt is 10 seers per rupee.

D In the subdivisions the retail prices of salt per rupee are:—Contai 7 seers, Ghatal 10 seers 7 chitaks, Tamluk not reported.

E In the subdivisions the retail prices of salt per rupee are:—Serampore (Bhadreswar) 11 $\frac{1}{2}$  seers and Jahanabad 10 seers.

F At Ulubaria the retail price of salt is 10 seers per rupee.

G In the marts in the interior of the district the retail prices of salt per rupee are:—Chetla 10 seers 10 $\frac{1}{2}$  chitaks, Barasat 10 seers, Magra Hât 9 seers 2 chitaks and Baduria 10 seers 10 chitaks.H In the subdivisions the retail prices of salt per rupee are:—Kushtia (Bahadurkhali) 10 $\frac{1}{2}$  seers, Chuadanga 10 seers, Meherpur 10 seers and Ranaghat 10 seers.

I In the subdivisions the retail prices of salt per rupee are:—Kandi 10 seers 5 chitaks and Jangipur 10 seers 4 chitaks.

J In the subdivisions the retail prices of salt per rupee are:—Jhenida 9 seers, Magura 9 $\frac{1}{2}$  seers, Narail 9 $\frac{1}{2}$  seers, and Bangaon 10 seers.



SEERS OF 80 TOLAHS.

BAJRA OR CUMBU. ( <i>Pennisetum typhoides</i> .)			MARUA OR RAGI. ( <i>Eleusine Corocana</i> .)		
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.

S. Ch. S. Ch. S. Ch. S. Ch. S. Ch. S. Ch.

...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

...	...	...	...	...	...
16 0	16 0	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	14 0	14 0	10 8
...	...	...	...	...	...
...	...	...	...	...	...
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...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)			GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. ( <i>Cicer arietinum</i> .)		
Present return.	Next preceding re- turn.	re- Corresponding turn of last year.	Present return.	Next preceding re- turn.	re- Corresponding turn of last year.

S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
...	...	...	16 0	16 0	17 0
...	...	...	16 8	16 8	18 0
...	...	...	17 10	17 12	16 0
...	...	...	16 0	16 0	14 8
...	...	...	16 0	16 0	12 4
...	...	...	...	...	...

8 0	8 0	6 0	20 0	20 0	20 0
8 0	6 15	8 0	18 13	17 4	16 0
...	...	...	20 8	20 0	21 5
...	...	...	18 0	19 0	20 0
...	...	...	16 0	16 0	16 0
...	...	...	11 0	12 0	11 0

...	...	...	20 4	19 8	18 12
...	...	...	13 12	13 8	16 0
...	...	...	14 0	15 0	14 0
...	...	...	12 0	12 4	11
...	...	...	13 1	13 1	13
...	...	...	13 6	12 12	13 6
...	...	...	17 0	18 0	16 0

...	...	...	14 8	16 0	14 0
...	...	...	12 8	12 8	12 8
...	...	...	13 4	13 0	11 0
...	...	...	13 8	15 4	13 4



## Head-quarters Station Bazars of the Districts of Bengal on the 31st May, 1894.

															WHOLESALE PRICES PER MAUND OF 40 SEERS.			DISTRICTS.	Number.															
INDIAN-CORN OR MAIZE. (Zea Mays.)			ARHAR OR THUR, CADJAN PEA. (Cajanus Indicus.)			FIREWOOD.			SALT.			SALT.																						
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.																				
S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	Rs. A. P.																				
...	...	...	12	0	13	8	19	8	80	0	80	0	106	9	10	8	10	8	11	13	3	10	0	3	10	0	3	5	4	Burdwan.	1			
...	...	...	13	8	13	8	20	0	200	0	200	0	240	0	11	0	11	0	11	0	3	10	6	3	10	6	3	10	6	Birbhum.	2			
...	...	...	13	5	13	1	12	0	320	0	320	0	320	0	10	8	10	10	11	0	3	13	0	3	12	0	3	10	0	Bankura.	3			
...	...	...	16	0	18	0	19	0	220	0	220	0	240	0	10	8	10	0	11	7	3	11	0	3	14	0	3	7	0	Midnapore.	4			
...	...	...	13	0	13	0	13	5	160	0	160	0	120	0	10	0	10	0	10	0	4	0	0	4	0	0	3	6	0	Hooghly.	5			
...	...	...	12	0	12	8	12	10	105	0	105	0	105	0	10	0	10	10	10	0	3	12	0	3	12	0	3	8	0	Howrah.	6			
...	...	...	18	0	18	0	21	0	100	0	100	0	100	0	10	8	11	0	3	6	0	3	6	0	3	4	6	24-Parganas	7					
20	0	21	0	20	0	16	0	16	6	20	0	94	0	94	0	85	0	11	6	11	6	10	7	3	8	0	3	8	0	3	13	0	Calcutta.	8
...	...	...	18	0	16	0	22	3	128	0	128	0	128	0	10	0	10	10	3	10	0	3	12	0	3	8	0	3	8	0	Nadia	9		
...	...	...	19	0	19	0	20	0	200	0	200	0	200	0	10	8	10	8	3	8	0	3	8	0	3	7	0	3	7	0	Murshidabad.	10		
...	...	...	18	0	16	0	20	0	120	0	120	0	120	0	9	2	9	14	4	0	0	4	0	0	3	10	0	3	10	0	Jessore.	11		
...	...	...	11	0	11	0	11	0	160	0	160	0	160	0	9	0	9	0	10	8	4	0	0	4	0	0	3	12	0	3	12	0	Khulna.	12
...	...	...	20	2	20	6	20	0	240	0	240	0	240	0	9	9	9	0	9	9	4	0	0	4	0	0	3	10	8	Rajshahi.	13			
...	...	...	...	...	...	...	...	...	120	0	120	0	160	0	10	0	10	0	10	8	4	0	0	4	0	0	3	12	0	Dinajpur.	14			
...	...	...	10	0	10	0	10	0	160	0	160	0	200	0	9	8	9	0	10	0	4	0	0	4	4	0	4	0	0	Jalpaiguri.	15			
20	0	20	0	11	0	8	0	8	0	120	0	120	0	120	0	8	0	8	0	4	12	0	4	13	0	4	10	0	Darjeeling.	16				
...	...	...	13	13	13	1	8	0	70	0	80	0	160	0	9	0	9	0	8	8	4	0	0	4	0	0	4	0	0	Rangpur.	17			
...	...	...	...	...	...	...	...	...	90	0	90	0	90	0	8	13	9	0	9	4	4	2	8	4	2	8	4	2	8	Bogra.	18			
...	...	...	18	12	18	12	22	8	200	0	200	0	200	0	9	12	9	12	10	8	3	12	0	3	13	0	3	9	6	Pabna.	19			
...	...	...	...	16	0	19	0	120	0	120	0	120	0	8	0	8	0	10	0	4	0	0	4	0	0	3	9	0	Dacca.	20				
...	...	...	13	0	13	0	13	0	120	0	120	0	120	0	8	0	8	0	10	0	4	0	0	4	0	0	4	0	0	Mymensingh.	21			
...	...	...	...	...	...	...	...	...	120	0	...	...	...	9	8	10	0	10	12	4	3	0	4	0	0	3	12	0	Faridpur.	22				
...	...	...	11	6	11	6	...	...	80	0	80	0	80	0	10	0	10	0	10	10	4	0	0	4	0	0	3	12	0	Backergunge.	23			

K In the subdivisions the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 10½ seers.

L In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers, Naugaon 8 seers 10 chitaks.

M At Alipur the retail price of salt is 8 seers per rupee.

N At Silliguri the retail price of salt is 9 seers per rupee.

O In the subdivisions the retail prices of salt per rupee are :—Gaibanda 10 seers, Kurigaon 8 seers and Nilphamari 9 seers.

P At Sirajganj the retail price of salt is 10½ seers per rupee.

Q In the marts in the interior of the district the retail prices of salt per rupee are :—Madanganj 10 seers 5 chitaks, Manikganj 9 seers, Mirkadinj 10 seers 5 chitaks, Munshirhat 10 seers 5 chitaks.

R In the subdivisions the retail prices of salt per rupee are :—Jamalpur 8½ seers, Kargmari 10 seers, Kishorganj 9 seers 2 chitaks and Netrakona 8 seers.

S In the subdivisions the retail prices of salt per rupee are :—Madaripur 9½ seers and Goalundo 10 seers.

T In the subdivisions the retail prices of salt per rupee are :—Pirojpur 8 seers, Patuakhali 9 seers, and Bhola 8 seers.

## PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

Number.		DISTRICTS.	QUANTITIES PER RUPEE IN														
			WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLU. (Sorghum Vulgare.)		
			Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL—continued.																	
CHITTAGONG DIVISION.	24	Tippera	9 0	10 0	11 0	...	...	...	9 0	9 0	8 4	9 8	10 0	10 12	...	...	...
	25	Noakhali	...	...	...	...	...	...	8 8	9 8	10 0	9 8	10 8	11 0	...	...	...
	26	Chittagong	11 0	11 0	10 0	...	...	...	11 0	11 0	10 8	12 4	12 8	12 4	...	...	...
BIHAR.																	
PATNA DIVISION.	27	Patna	19 0	19 0	15 8	25 0	25 0	21 0	10 0	10 0	10 0	14 8	16 0	15 8	22 0	21 0	23 8
	28	Gaya	14 0	13 8	15 0	22 0	24 0	20 0	9 4	9 8	9 8	15 0	15 0	13 4	17 12	18 4	19 0
	29	Shahabad	14 0	13 0	13 0	20 0	20 0	18 0	8 0	8 0	8 0	12 0	13 0	13 4	...	...	...
	30	Saran	16 8	15 4	14 8	22 0	21 12	20 8	10 0	11 0	10 0	13 0	13 8	13 0	...	...	...
	31	Champaran	16 0	16 0	13 0	24 8	26 4	22 8	8 8	8 8	8 8	14 8	14 8	14 8	...	...	...
	32	Muzaffarpur	14 0	15 8	14 0	20 0	22 0	20 0	8 0	8 0	8 0	13 0	14 0	14 0	...	...	...
	33	Darbhanga	17 8	16 8	13 3	22 0	24 4	20 6	12 4	12 0	11 0	13 12	13 12	14 0	...	...	...
BHAGALPUR DIVISION.	34	Monghyr	16 12	16 13	14 0	21 0	22 0	21 0	9 7	9 8	8 0	14 2	13 9	12 0	...	...	...
	35	Bhagalpur	16 3	16 6	15 2	22 4	22 11	18 15	12 10	13 4	12 10	15 2	15 12	14 8	...	...	...
	36	Purnea (Kasba)	20 0	20 0	13 0	...	...	...	12 0	12 8	11 0	15 0	16 0	13 0	...	...	...
	37	Malda (English Bazar).	16 0	16 0	14 0	...	...	...	10 0	10 0	10 0	15 0	15 0	12 8	...	...	...
	38	Sonbhal Parganas.	13 8	12 8	11 8	...	...	...	12 0	12 0	11 8	15 0	15 0	14 8	...	...	...
ORISSA.																	
ORISSA DIVISION.	39	Cuttack	13 2	13 2	13 2	...	...	...	10 8	10 8	10 8	13 2	13 13	13 13	...	...	...
	40	Balasore	14 0	14 0	11 0	8 0	8 0	10 0	11 0	12 0	10 0	16 0	17 0	14 0	...	...	...
	41	Puri	13 0	13 0	10 8	...	...	...	6 9	6 9	9 3	14 7	14 7	15 0	...	...	...
CHOTA NAGPUR.																	
CHOTA NAGPUR DIVISION.	42	Hazaribagh	12 8	12 8	12 0	16 0	16 0	16 0	8 0	8 0	7 0	14 8	14 8	12 0	...	...	...
	43	Lohardaga (Ranchi).	10 0	10 0	10 0	10 0	15 0	14 0	12 0	13 0	10 0	14 0	15 0	12 0	...	...	...
	44	Palamau	14 10	13 8	14 1	...	...	...	11 4	11 4	11 4	12 15	14 1	13 8	...	...	...
	45	Manbhum	14 8	13 8	13 0	16 0	16 0	16 0	10 0	11 8	9 0	14 8	16 0	13 8	...	...	...
	46	Singhbhum	14 0	14 0	10 0	12 0	12 0	...	10 0	12 0	8 0	12 0	14 0	10 0	...	...	...

- U In the Brahmanbaria and Chandpur subdivisions the retail price of salt is 8 seers per rupee.  
V In Fenny Hat the retail price of salt is 8 seers per rupee.  
VI At Cox's Bazar the retail price of salt is 8½ seers per rupee.  
W In the subdivisions the retail prices of salt per rupee are :—Barh 11 seers, Bihar 10 seers, and Dinapore 10 seers 2 chitaks.  
X In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Nawada 9 seers and Aurangabad 9½ seers.  
Y In the subdivisions the retail prices of salt per rupee are :—Buxar 10 seers, Sasaram 9½ seers and Bhabhua 9½ seers.  
Z In the subdivisions the retail prices of salt per rupee are :—Siwan 10 seers 6 chitaks, Gopalganj (Mirganj) 11 seers 1 chitak.  
a At Bettiah the retail price of salt is 9½ seers per rupee.  
b In the subdivisions the retail prices of salt per rupee are :—Hajipur 10 seers and Sitamarhi 11 seers.



SEERS OF 80 TOLAHS.

BAJRA OR CUMBU. ( <i>Pennisetum typhoides</i> .)			MARUA OR RAGI. ( <i>Eleusine Corocana</i> .)		
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.

S. Ch. S. Ch. S. Ch. S. Ch. S. Ch. S. Ch.

...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	22 0	22 0	21 8

...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

...	...	...	23 0	23 8	22 8
...	...	...	28 0	28 0	25 0
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

KANGNI OR KARUN, ITALIAN MILLET, ( <i>Setaria italica</i> .)						GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. ( <i>Oicer arietinum</i> .)					
Present return.	Next preceding re- turn.	re- Corresponding turn of last year.	Present return.	Next preceding re- turn.	re- Corresponding turn of last year.	Present return.	Next preceding re- turn.	re- Corresponding turn of last year.	Present return.	Next preceding re- turn.	re- Corresponding turn of last year.
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
...	...	...	13 0	14 0	12 0	...	...	...	...	...	...
...	...	...	12 0	12 0	12 0	...	...	...	...	...	...
...	...	...	12 4	12 8	11 0	...	...	...	...	...	...
16 0	17 0	22 0	22 0	23 0	22 0	...	...	...	...	...	...
11 0	11 0	14 0	20 4	19 8	19 0	...	...	...	...	...	...
...	...	...	20 0	20 0	19 0	...	...	...	...	...	...
15 0	16 0	18 0	20 8	21 0	20 0	...	...	...	...	...	...
...	...	...	22 8	23 4	20 0	...	...	...	...	...	...
...	...	...	19 0	21 8	20 0	...	...	...	...	...	...
...	7 0	11 9	20 12	20 12	20 0	...	...	...	...	...	...
12 9	13 9	16 8	{ 21 0 to 22 0 }	{ 21 10 to 22 0 }	{ 20 0 to 21 0 }	...	...	...	...	...	...
...	...	...	...	19 9	20 0	...	...	...	...	...	...
...	...	...	18 0	18 0	20 0	...	...	...	...	...	...
13 0	13 0	13 0	16 0	16 0	17 0	...	...	...	...	...	...
...	...	...	16 0	16 0	14 0	...	...	...	...	...	...
...	...	...	15 12	16 7	14 0	...	...	...	...	...	...
...	...	...	12 0	12 0	15 0	...	...	...	...	...	...
...	...	...	16 0	16 0	14 0	...	...	...	...	...	...
...	...	...	14 7	15 0	11 0	...	...	...	...	...	...
...	...	...	16 0	16 0	14 0	...	...	...	...	...	...
...	...	...	12 0	{ 12 0 to 14 0 }	13 0	...	...	...	...	...	...
...	...	...	15 3	{ 17 7 to 16 0 }	20 0	...	...	...	...	...	...
...	...	...	17 0	{ 16 0 to 17 0 }	16 0	...	...	...	...	...	...
...	...	...	12 0	12 0	11 0	...	...	...	...	...	...



## Station Bazars of the Districts of Bengal on the 31st May, 1894—(concluded).

															WHOLESALE PRICES PER MAUND OF 40 SEERS.			DISTRICTS.	Number.
INDIAN-CORN OR MAIZE (Zea Mays.)			ARHAR OR THUR, CADJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			SALT.							
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.					
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.					
...	...	...	6 0	6 0	12 0	...	...	...	U 8 0	8 0	10 13½	4 2 0	4 2 0	3 12 0	Tippera	24			
...	...	...	...	...	...	...	...	...	V 8 8	8 8	10 0	4 8 0	4 8 0	3 14 0	Noakhali	25			
...	...	...	...	...	...	80 0	80 0	106 0	V1 10 0	10 0	9 0	3 14 0	3 14 0	3 14 0	Chittagong.	26			
BENGAL—continued.																			
21 0	21 0	21 0	24 0	24 0	23 0	130 0	130 0	130 0	W 11 0	10 8	11 0	3 10 0	3 10 0	3 10 0	Patna.	27			
...	...	...	22 0	19 0	19 0	120 0	120 0	120 0	X 10 0	10 0	9 12	3 14 0	3 13 0	3 13 0	Gaya.	28			
16 0	20 0	20 0	20 0	20 0	20 0	140 0	140 0	160 0	Y 10 0	10 8	10 8	4 0 0	3 13 0	3 13 0	Shahabad.	29			
19 8	19 12	19 12	21 0	21 0	22 0	160 0	160 0	210 0	Z 10 8	10 4	10 4	3 12 0	3 12 0	3 12 3	Saran.	30			
17 0	19 0	20 8	24 0	24 0	20 8	180 0	160 0	160 0	a 10 8	10 8	10 0	3 12 0	3 13 0	3 13 0	Champaran.	31			
16 8	18 0	19 0	19 0	21 0	20 0	160 0	160 0	160 0	b 11 0	10 8	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur.	32			
20 12	21 8	20 4	19 12	20 12	21 8	176 0	176 0	176 0	c 11 0	11 0	10 4	3 8 0	3 8 0	3 14 0	Darbhanga.	33			
17 5	23 1	21 0	16 12	16 13	19 0	147 0	126 0	160 0	d 10 8	10 8	10 8	3 9 6	3 13 0	3 7 6	Monghyr.	34			
20 3	20 3	22 11	17 10	17 4	20 3	126 9	138 0	123 4	e 10 10	10 0	10 11	3 12 0	4 0 0	3 12 0	Bhagalpur.	35			
...	...	...	16 0	16 0	14 0	320 0	320 0	320 0	f 10 0	10 0	10 0	3 10 6	3 10 0	3 10 0	Purnea (Kasba).	36			
...	...	...	13 0	13 0	11 0	100 0	100 0	160 0	g 9 8	9 0	9 8	...	...	...	Malda (English Bazar).	37			
18 0	20 0	19 0	19 0	23 8	130 0	130 0	200 0	10 0	h 10 0	10 0	10 8	3 12 0	3 12 0	3 10 3	Sonthal Parganas.	38			
ORISSA.																			
...	...	...	17 1	18 6	18 6	80 0	80 0	80 0	i 9 0	10 12	10 12	3 12 0	3 6 0	3 8 0	Cuttack.	39			
...	...	...	11 0	11 0	10 12	130 0	130 0	160 0	j 10 8	10 0	11 0	3 12 0	3 12 0	3 6 0	Balasore.	40			
...	...	...	14 7	16 0	15 12	80 0	80 0	80 0	k 11 0	10 10	10 10	3 8 0	3 10 0	3 10 0	Puri.	41			
CHOTA NAGPUR.																			
16 0	16 0	15 8	16 0	16 0	17 0	240 0	240 0	240 0	l 8 0	9 0	9 0	4 7 6	4 7 6	4 2 0	Hazaribagh.	42			
16 0	17 0	18 0	10 0	10 0	13 0	160 0	160 0	140 0	m 8 12	9 4	9 0	4 8 0	4 4 0	4 3 0	Lohardaga (Ranchi).	43			
...	...	...	15 3	18 0	...	...	...	...	n 7 14	8 7	8 7	...	...	...	Palamau.	44			
24 0	24 0	18 0	...	18 0	18 0	...	...	...	o 10 10	10 0	10 10	4 0 0	4 0 0	3 11 0	Manbhum.	45			
...	...	...	12 0	16 0	13 0	100 0	100 0	100 0	p 8 0	8 0	9 0	4 6 0	4 6 0	4 6 0	Singbhum.	46			

c In the subdivisions the retail prices of salt per rupee are :—Madhubani 9 seers and Samastipur 10 seers.

d In the subdivisions the retail prices of salt per rupee are :—Begusarai 10 seers and Jamui 10 seers.

e In the subdivisions the retail prices of salt per rupee are :—Banka 9 seers 6 chitaks, Madhipura 9 seers and Supaul 10 seers.

f In the subdivisions the retail price of salt per rupee are :—Kishanganj 10 seers and Araria 9 seers.

g In the subdivisions the retail prices of salt per rupee are :—Deoghur 10½ seers, Godda 9 seers, Jamtara 9 seers, Pakur 10½ seers and Rajmahal 10 seers.

h In the subdivisions the retail prices of salt per rupee are :—Jajpur 8 seers, Kendrapara 9 seers, and Banki 11 seers.

i At Bhadrak the retail price of salt is 9 seers per rupee.

j At Giridih the retail price of salt is 10½ seers per rupee.

k At Gobindpur the retail price of salt is 11 seers per rupee.

Published for general information.

C. E. BUCKLAND,  
Secretary to the Govt. of Bengal.

*PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt*

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 2 0	3 1 0	3 0 0	2 0 0	2 4 0	2 4 0	5 6 0	5 5 0	4 14 0	4 0 0	3 15 0	3 12 0
2	Sirajganj ...	2 10 0	2 12 0	2 10 0	...	...	...	5 8 0	5 6 0	6 0 0	3 8 0	3 7 0	3 12 0
3	Dacca ...	3 0 0	3 0 0	3 4 0	...	...	...	5 0 0	4 0 0	4 0 0	4 0 0	3 8 0	3 12 0
4	Narayanganj ...	...	...	...	...	...	...	4 8 0	3 12 0	4 4 0	4 0 0	3 6 0	4 0 0
5	Chittagong ...	3 8 0	3 8 0	4 0 0	...	...	...	3 6 0	3 6 0	3 8 0	3 2 0	3 0 0	3 1 0
6	Patna ...	2 1 0	Red. 2 1 0	2 9 3	1 9 6	1 9 0	1 14 6	3 14 0	3 13 6	4 0 0	2 10 6	2 7 0	2 9 9
		2 5 6	White. 2 3 0	3 0 0									
7	Cuttack ...	3 0 0	3 0 0	3 0 0	...	...	...	3 10 0	3 10 0	3 10 0	3 0 0	2 12 0	2 14 0
8	Balasore ...	2 12 0	2 12 0	3 12 0	4 12 0	4 12 0	3 12 0	3 8 0	3 2 0	3 12 0	2 8 0	2 4 0	2 13 0
9	Puri ...	3 0 0	3 0 0	3 12 0	...	...	...	5 12 0	5 12 0	4 4 0	2 11 0	2 11 0	2 10 0

CALCUTTA,  
The 5th June, 1894.



JOWAR OR CHOLUM. ( <i>Sorghum Vulgare.</i> )			BAJRA OR CUMBU. ( <i>Pennisetum typhoidesum.</i> )		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.
2 4 0 2 4 0	2 0 0	2 8 0	2 8 0	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
1 12 0 1 14 0	1 11 0	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

MARUA OR RAGI. ( <i>Eleusine Corocana.</i> )			KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Setaria italica.</i> )		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
...	...	...	5 0 0	5 12 0	5 0 0
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	2 6 0	2 3 6	1 13 0
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...



*in the undermentioned Marts of Bengal on the 31st May, 1894.*

GRAM, CHANA, CHHOLA KADALAY OR SUNAGA. ( <i>Cicer Arietinum.</i> )			INDIAN-CORN OR MAIZE. ( <i>Zea Mays.</i> )			ARHAR OR THUR, CADJAN PEA. ( <i>Cajanus indicus.</i> )			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 2 0	2 5 0	2 8 0	2 0 0	1 12 0	2 0 0	2 8 0	2 7 0	2 0 0	0 6 9	0 6 9	0 7 0	3 8 0	3 8 0	3 13 0	Calcutta.
2 10 0	2 8 0	3 0 0	...	...	...	...	...	...	0 6 6	0 6 6	0 6 6	3 12 0	3 13 0	3 8 0	Sirajganj.
2 12 0	2 8 0	2 12 0	...	...	...	...	2 8 0	2 1 0	0 5 0	0 5 0	0 5 0	4 0 0	4 0 0	3 9 0	Dacca.
2 6 0	2 6 0	3 8 0	...	...	...	1 12 0	1 12 0	3 4 0	0 6 0	0 6 0	0 6 0	3 14 0	3 14 0	3 10 0	Narayanganj.
3 4 0	3 4 0	3 8 0	...	...	...	...	...	...	0 8 0	0 8 0	0 6 0	3 14 0	3 14 0	3 14 0	Chittagong.
1 12 0	1 11 0	1 13 0	1 14 0	1 12 0	1 14 6	1 9 6	1 9 6	1 11 9	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 10 0	Patna.
(Kalai) 2 8 0	2 7 0	2 0 0	...	...	...	2 6 0	2 2 0	2 2 0	0 8 0	0 8 0	0 8 0	3 12 0	3 6 0	3 8 0	Cuttaek.
2 14 0	2 14 0	2 14 0	...	...	...	3 8 0	3 8 0	3 10 0	...	...	...	3 12 0	3 12 0	3 6 0	Balasore.
2 11 0	2 9 0	2 5 0	...	...	...	2 11	2 6 0	2 8 0	0 8 0	0 8 0	0 8 0	3 8 0	3 10 0	10 0	Puri.

C. E. BUCKLAND,  
Secretary to the Govt. of Bengal.

## Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.	STATION OBSERVATIONS.														
	DIVISION.	DISTRICT.	Representative station.	AIR PRESSURE.				WIND.		TEMPERATURE.					
				Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant grav. iv. lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
SOUTH-WEST BENGAL.	Burdwan	Burdwan	Burdwan	29°458	29°502	-106	SWly	150	112°3	27th May	77°2	1, 2 June	102°4	80°1	91°3
		Birbhum	Raniganj	29°231	29°508	-122	NE	231	114°8	28th "	75°4	1st "	100°5	80°9	93°7
		Bankura	Bankura	29°239	29°481	-091	S & Calm	138	117°1	28th "	75°6	1st "	108°1	81°9	95°0
		Midnapore	Midnapore	29°426	29°518	-096	SE	195	117°4	29th "	79°0	31st May	108°1	82°1	95°1
		Hooghly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Presidency	Howrah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		24 Parganas	Saugor Island	29°562	29°531	-084	SWly	525	92°2	27, 28, 31, & 2 June, 31st May	81°0	2nd June	91°6	83°5	87°5
		Calcutta	Calcutta	29°558	29°525	-088	SWly	209	97°1	31st May	74°2	31st May	94°9	80°6	87°8
		Nadia	Krishnagar	29°521	29°514	-090	SE	220	104°2	27th "	75°7	2nd June	97°7	78°6	88°2
		Murshidabad	Berhampore	29°512	29°527	-090	SEly	139	112°7	27th "	76°3	30th May & 2nd June	101°2	79°2	90°2
NORTH BENGAL.	Rajshahi	Jessore	Jessore*	29°549	29°528	-102	SEly	146	99°0	27th "	71°4	30th May	95°9	78°7	87°3
		Khulna	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Rajshahi	Rampur Boalia	29°500	29°519	-093	SE	171	105°0	28th "	74°1	30th "	96°6	78°0	87°3
		Dinajpur	Dinajpur	29°486	29°562	-083	E	109	101°1	27th "	72°2	29 & 30 "	92°8	75°1	84°0
		Jalpaiguri	Jalpaiguri	29°358	29°600	-061	SEly	141	93°9	2nd June	70°1	29th "	88°7	73°2	81°0
	Dacca	Darjeeling	Darjeeling	22°850	—	-078	Variable	140	67°1	27, 28 May	52°7	30th "	64°9	54°0	59°6
		Gnatong	Gnatong	?	?	?	Variable	103	58°4	31st "	35°1	27th "	49°6	37°5	43°0
		Kuch Bihar	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Rangpur	Rangpur	29°508	29°554	-079	Ely	103	93°8	27th "	70°7	29, 30th "	88°4	73°7	81°1
		Bogra	Bogra	29°539	29°552	-075	SE	96	98°2	27th "	72°2	30, 31 "	90°4	75°1	82°8
EAST BENGAL.	Dacca	Pabna	Sirajganj	29°558	29°557	-087	SE	142	95°3	27th "	72°2	30th "	89°9	74°6	82°3
		Dacca	Narayanganj	29°593	29°561	-063	SEly	233	93°6	27, 28 May	72°2	30th "	89°5	76°6	83°1
		Mymensingh	Mymensingh	29°572	29°582	-083	SEly	170	93°2	27th "	69°6	28th "	87°3	73°7	80°5
		Faridpur	Faridpur	29°577	29°571	-088	Ely	130	95°5	27th "	73°9	30, 31 "	88°5	77°5	83°0
		Backergunge	Barisal	29°598	29°556	-092	Calm	170	92°3	28th "	75°4	27, 31 "	90°7	77°7	84°2
	Chittagong	Tippera	Comilla	29°598	29°582	-089	Ely	295	91°3	28th "	70°3	29th "	86°6	75°8	80°2
		Noakhali	Noakhali	29°595	29°585	-077	SE	?	89°5	28th May	68°8	29th "	86°4	76°7	81°1
		Chittagong	Chittagong	29°588	29°622	-061	SEly	193	87°7	27, 28 "	68°6	30th "	86°1	73°4	79°8
		South Lushai Hills	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Patna	Bankipore	29°368	29°591	-095	E	214	114°1	27th "	75°2	29th "	104°4	79°5	92°0
BIHAR.	Patna	Gaya	Gaya	29°158	29°476	-102	NEly	226	114°1	28th "	79°8	1st June	109°9	83°7	96°8
		Shahabad	Debri	29°191	29°484	-081	Ely	214	114°5	27 to 29 "	80°0	20th May	109°3	82°6	96°0
		Buxar	Buxar	29°349	29°498	-081	Ely	190	111°9	28th "	75°3	1st June	106°0	80°3	93°2
		Arrah	Arrah	29°555	29°493	-081	NE	123	113°0	27, 28 "	76°5	1st "	106°6	80°1	93°4
		Saran	Chapra	29°382	29°513	-071	ESE	199	113°2	27th "	75°6	1st "	104°8	79°1	92°0
	Bhagalpur	Champaran	Motihari	29°348	29°527	-077	ESE	225	107°0	28th "	73°8	1st "	99°1	76°7	88°0
		Muzaffarpur	Muzaffarpur	29°401	29°531	—	ESE	209	109°2	27th "	75°2	29th May	101°4	77°8	83°6
		Darbhanga	Darbhanga	29°414	29°532	-080	ESE	218	107°0	27th "	74°7	29th "	98°1	77°9	88°0
		Monghyr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Bhagalpur	Bhagalpur	29°409	29°521	-074	Ely	142	111°8	27th "	73°0	30th "	101°1	76°7	88°9
ORISSA.	Orissa	Purnea	Purnea	29°467	29°544	-076	NEly	193	104°3	27th "	70°2	2nd June	97°6	76°6	87°1
		Malda	Malda*	29°511	29°534	-073	NE	126	112°5	27th "	75°0	30th May	99°0	77°5	88°3
		Sonthal Parganas	Naya Dumka	29°064	29°500	-090	Ely	214	114°7	28th "	74°8	1st June	103°5	79°0	91°3
		Cuttack	Cuttack	29°492	29°513	-093	SWly	137	111°3	30th "	74°8	1 & 2 "	106°1	80°4	93°3
		False Point	False Point	29°575	29°538	-073	SW	412	91°5	31st "	67°0	1st "	90°4	80°0	85°2
	Chota Nagpur	Balasore	Balasore	29°502	29°503	-105	SWly	250	111°0	27th "	75°7	2nd "	103°0	80°8	92°0
		Puri	Puri	29°569	29°524	—	SW	370	91°7	2nd June	75°6	1st "	88°4	80°6	84°5
		Gopalpur	Gopalpur	29°561	29°522	—	SSW	563	91°7	2nd "	79°1	30th May	89°6	80°2	84°9
		Hazaribagh	Hazaribagh	27°598	29°483	-067	Sly	283	108°6	28, 29 May	73°3	1st June	104°6	79°5	92°1
		Lohardaga	Ranchi	27°475	29°475	-079	W & SE	246	107°5	28 to 30 "	72°9	2nd "	104°1	79°2	91°7
ASSAM.	Chota Nagpur	Palamanu	Daftonganj	?	?	?	NEly	268	114°7	30th "	80°0	27th May	114°0	82°0	98°5
		Manbhum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Singbhum	Chaibassa	28°788	29°472	-093	SWly	87	117°8	29th "	73°7	2nd June	110°6	85°0	97°3
		Sibsagar	Sibsagar	29°362	29°654	-055	Calm	—	93°2	1st June	68°0	29th May	82°4	70°1	76°5
CHOTA NAGPUR.	Chota Nagpur	Goalpara	Dhubri	29°527	29°596	-079	NEly	245	96°2	1st "	68°1	28th "	84°1	71°7	77°9
		Cachar	Silchar	29°578	29°633	-064	Calm	—	95°0	1st "	68°2	27th "	84°9	71°1	78°0

\* Mean of six days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the mean of the atmospheric humidity is expressed at percentage, saturated air being represented by 100. A clear sky is denoted by 0 and an overcast sky by 10. The mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisions, stations for the period in question stations in the district sending in returns divided by the number of stations. A rainy day is one of which at least a tenth of an inch fell.





Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 2nd of June 1894.

Meteorological division.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1894.	Average rainfall from 16th May to date.	
				Sunday, 27th May.	Monday, 28th May.	Tuesday, 29th May.	Wednesday, 30th May.	Thursday, 31st May.	Friday, 1st.	Saturday, 2nd.								
SOUTH-WEST BENGAL.	Burdwan.	Burdwan ...	Kalna ...	...	...	...	0'08	...	...	...	Nil	0'08	1'11	Nil	0'41	1'00	2'01	
			Burdwan ...	...	...	...	0'46	...	0'40	...	2	0'86	1'42	0'40	0'23	0'92	2'92	
			Katwa ...	...	...	...	...	...	...	...	2	1'10	1'92	0'35	0'41	1'10	3'26	
			Raniganj ...	...	...	...	0'75	...	...	...	Nil	Nil	0'88	Nil	0'14	Nil	2'04	
			Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?	
		Birbhum ...	Suri ...	...	...	...	...	...	...	...	Nil	Nil	1'26	Nil	0'23	Nil	2'42	
			Hetampur ...	...	...	...	...	...	0'01	...	Nil	0'01	0'81	0'01	0'24	0'01	1'73	
			Rampur Hat ...	...	...	...	...	...	0'77	...	1	0'77	1'48	0'77	0'59	0'77	2'06	
			Bolpur ...	...	...	...	...	...	1'34	...	1	1'34	?	1'34	?	1'34	?	
			Murari ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?	
		Bankura ...	Labpur ...	...	...	...	...	...	0'16	...	1	0'16	?	0'16	?	0'16	?	
			Bankura ...	...	...	...	...	...	...	...	Nil	Nil	1'39	Nil	0'40	Nil	2'59	
			Vishnupur ...	...	...	...	...	...	...	...	Nil	Nil	1'48	Nil	0'52	Nil	2'79	
			Maliara ...	...	...	...	...	...	...	...	Nil	Nil	1'26	Nil	0'26	Nil	2'04	
			Khatra ...	...	...	...	...	...	...	...	Nil	Nil	1'23	Nil	0'36	Nil	2'08	
	Presidency.		Indas ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?	
			Kotalpur ...	...	...	...	...	...	0'30	...	1	0'30	?	0'30	?	0'30	?	
			Onda ...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?	
			Gangojalghati ...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?	
			Raipur ...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?	
			Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?	
	Midnapore ...	Contai ...	...	...	...	...	...	...	...	1	0'14	1'13	0'14	0'36	0'14	2'36		
		Tamluk ...	...	...	...	...	...	...	...	1	0'37	1'24	0'37	0'37	0'41	2'60		
		Midnapore ...	...	...	...	...	...	...	...	Nil	Nil	0'88	Nil	0'24	Nil	2'19		
		Ghatal ...	...	...	...	...	0'96	...	...	1	0'96	1'21	Nil	0'34	1'36	1'98		
		Kukurahati ...	...	...	...	...	0'47	...	...	1	0'47	?	?	?	0'47	?		
	Hooghly ...	Gaybheta ...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	0'23	?		
		Panskura ...	...	...	...	...	0'45	...	...	2	0'56	?	0'11	?	0'86	?		
		Dantoon ...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	Nil	?		
		Serampore ...	...	...	...	...	1'67	...	...	1	1'73	1'84	0'06	0'72	1'73	2'91		
		Hooghly ...	...	...	...	...	0'21	...	...	2	0'57	1'61	0'57	0'49	0'78	3'21		
	Rajshahi.	Howrah ...	Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	1'18	Nil	0'26	Nil	2'01	
			Howrah ...	...	...	...	...	0'35	0'14	...	2	0'49	1'63	0'14	0'68	0'49	2'09	
			Mohesreka ...	...	...	...	...	0'07	...	...	Nil	0'07	1'06	Nil	0'39	0'07	2'85	
			Ulubaria ...	...	...	...	...	0'17	...	...	2	0'31	?	0'14	?	0'31	?	
			24-Parganas...	...	...	...	...	...	...	...	1	0'52	1'18	0'52	0'46	0'52	2'87	
		Nadia ...	Diamond ...	...	...	...	...	0'25	...	...	2	0'37	1'30	0'12	0'37	0'37	2'40	
			Harnour ...	...	...	...	...	...	...	...	1	0'12	?	?	?	0'12	?	
			Canning Town ...	...	...	...	...	...	...	...	2	0'40	1'94	0'14	0'86	0'40	3'42	
			Alipore (Obsy.) ...	...	...	...	...	0'28	0'04	...	2	1'28	2'06	0'25	0'83	1'28	3'21	
			Barrackpore ...	...	...	...	...	1'03	...	...	2	2'01	1'86	0'22	0'55	2'56	3'43	
		Murshidabad	Dum-Dum ...	...	...	...	...	1'79	...	...	2	2'20	1'87	0'10	0'61	2'20	3'43	
			Barasat ...	...	...	...	...	...	...	...	1	0'45	1'92	Nil	0'44	0'45	4'19	
			Basirhat ...	...	...	...	...	0'45	...	...	2	0'90	?	?	?	?	?	
			Nadia ...	...	...	...	...	...	...	...	1	0'65	1'87	Nil	0'65	0'65	3'48	
			Ranaghat ...	...	...	...	0'50	0'10	...	...	2	0'60	1'52	Nil	0'08	0'64	3'20	
	North Bengal.	Jessore ...	Chudanga ...	...	...	...	0'82	...	...	...	2	0'98	2'05	0'12	0'23	0'98	5'01	
			Meherpur ...	...	...	...	0'55	0'34	...	...	3	2'03	1'86	1'14	0'40	2'03	3'67	
			Kushtia ...	...	0'15	0'12	0'05	2'70	...	...	3	3'02	2'10	Nil	0'58	5'57	4'71	
			Murshidabad	...	...	...	...	...	...	...	Nil	0'09	1'57	0'09	0'59	0'09	3'17	
			Berhampore ...	...	...	...	...	...	...	...	1	0'21	1'91	0'21	0'43	0'21	3'64	
		Khulna ...	Lalbag ...	...	...	...	...	...	...	...	Nil	Nil	2'27	Nil	0'47	Nil	3'04	
			Azimganj ...	...	...	...	...	...	0'15	...	1	0'15	2'19	0'15	0'32	0'15	3'62	
			Jangipur ...	...	...	...	...	0'77	...	...	1	0'77	1'97	Nil	0'35	0'77	3'35	
			Lakola ...	...	...	...	...	...	...	...	1	0'30	1'78	0'30	0'42	0'30	3'34	
			Akhrganj ...	...	...	...	...	0'10	...	...	1	0'10	?	?	?	0'10	?	
		Rajshahi.	Patkabari ...	...	...	...	...	0'40	...	...	2	0'90	?	?	?	1'10	?	
			Jessore ...	...	...	...	0'68	1'00	...	...	3	1'98	1'09	0'30	0'45	2'18	3'28	
			Narail ...	...	...	...	0'12	2'12	3'48	...	4	5'92	1'61	0'20	0'62	7'34	4'09	
			Jhenidah ...	...	...	...	0'49	0'77	...	...	3	1'55	1'64	0'29	0'55	1'65	4'02	
			Magura ...			...	...	...	0'26	0'07	0'05	...	1	0'38	1'86	Nil	0'66	1'01	4'02
	Rajshahi.	Khulna ...	Bangon ...	...	...	...	...	0'48	...	...	1	0'48	1'67	Nil	0'57	0'68	3'05	
			Satkira ...	...	...	...	...	1'70	...	...	1	1'70	1'69	Nil	0'44	1'70	3'48	
			Bagerhat ...	...	...	...	0'54	0'18	...	...	3	1'35	1'33	0'63	0'29	1'35	3'60	
			Khulna ...	...	...	...	0'33	0'20	0'05	...	2	0'58	1'21	0'05	0'51	0'87	3'16	
			Nakipur ...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
		Rajshahi.	Rampal ...	...	...	...	...	...	...	...	Nil	0'11	1'37	0'09	0'31	0'13	3'37	
			Bonlia ...	...	0'02	...	...	...	...	...	1	0'31	1'39	Nil	0'33	1'89	3'81	
			Nator ...	...	0'31	...	...	...	...	...	1	1'63	3'06	1'63	0'93	2'77	4'72	
			Naugon ...	...	...	...	...	...	...	...	1	0'21	?	?	?	?	?	
			Lalpur ...	...	...	...	1'50	...	1'63	...	1	0'21	1'10	0'21	?	?	?	
		Dinajpur ...	Manda ...	...	...	...	...	...	...	...	1	0'16	3'40	1'10	0'94	1'45	4'58	
			Mahadebpur ...	...	...	...	...	...	1'10	...	1	0'16	2'45	0'16	0'38	0'16	3'55	
			Churaman ...	...	...	...	...	...	0'16	...	1	0'45	1'86	0'45	0'43	0'45	4'15	
			Raiganj ...	...	...	...	...	...	0'16	...	1	0'16	2'51	0'16	0'65	0'16	5'34	
			Dinajpur ...	...	...	...	...	...	...	...	2'55	1	2'53	3'79	2'53	4'29	6'15	
	Rajshahi.	Jalpaiguri ...	Balighat ...	...	...	...	...	...	...	...	1	1'29	1'29	?	?	?	?	
			Thakurgaon ...	...	...	...	...	...	...	...	Nil	0'12	3'89	0'08	1'14	1'93	8'78	
			Jalpaiguri ...	...	0'04	...	...	...	...	...	3	3'31	?	?	?	12'32	?	
			Alipore Dooar ...	...	0'88	0'38	...	...	...	...	2	1'05	?	?	?	8'70	?	
			Fallacotta ...	...	0'50	0'55	...	...	...	...	1	1'41	?	?	?	2'29	?	
		Darjeeling ...	Debiganj ...	...	...	0'01	...	...	...	...	3	4'21	?	?	?	16'16	?	
			Bhagatpur ...	...	1'20	1'10	1'87	0'34	...	...	?	?	?	?	?	?	?	
			(Nagrahatta) ...	...	...	...	...	...	...	...	4	8'18	5'19	1'40	1'44	24'02	14'55	
			Buxa ...	...	1'05	3'06	1'98	...	...	...	3	1'24	4'40	0'97	0'97	3'98	7'24	
			Siliguri ...	...	...	0'15	0'12	...	...	...	0'97	0'01	3	0'73	2'43	0'74	5'11	
	Rajshahi.	Kuch Bihar...	Kalimpong ...	...	...	0'14	0'43	...	...	...	2	0'57	1'66	Nil	0'43	1'30	3'01	
			Kurseong ...	...	...	...	0'84	0'02	...	...	1	0'86	?	?	?	2'87	?	
			Pedong ...	...	0'30	0'85	0'05	0'21	...	...	3	1'43	?	?	?	5'95	?	
			Dinhata ...	...	0'82	0'32	0'15	...										



## Statement of rainfall in Bengal for the week ending Saturday (8 a.m.), the 2nd of June 1894—contd.

Meteorological division.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1894.	Average rainfall from 16th May to date.
				Sunday, 27th May.	Monday, 28th May.	Tuesday, 29th May.	Wednesday, 30th May.	Thursday, 31st May.	Friday, 1st.	Saturday, 2nd.							
EAST BENGAL.	Dacca.	Dacca	Munshiganj...	...	...	0.40	3.75	...	...	0.22	3	4.37	2.33	0.22	0.74	0.20	4.06
			Dacca	...	...	0.49	0.44	0.06	...	0.38	3	1.37	1.00	0.33	0.74	4.78	4.06
			Narayanganj	...	...	0.34	1.45	...	...	0.17	3	1.96	2.18	0.17	0.37	6.53	4.01
			Manikganj	...	0.09	0.45	...	...	...	0.33	2	0.87	1.75	0.33	0.85	4.18	4.65
			Jaydebpur	...	0.08	0.07	...	...	...	0.07	Nil	0.22	?	0.07	?	4.70	?
		Mymensingh	Kishanganj	...	1.23	...	0.11	...	...	...	2	1.34	3.03	Nil	1.39	7.91	6.10
			Atia (Tangail)	...	...	...	...	...	...	...	Nil	Nil	1.63	Nil	0.76	5.71	4.07
			Mymensingh	...	0.62	...	0.03	...	0.80	0.16	3	1.61	2.77	0.16	1.48	7.06	7.08
			Jamulpur	...	0.75	...	...	...	...	0.39	2	1.14	2.17	0.39	0.89	2.67	5.02
			Netrakona	0.52	0.86	...	0.23	...	0.81	0.15	5	2.56	3.39	0.16	1.64	18.10	7.66
EAST BENGAL.	Dacca.	Faridpur	Subarnakhali	...	0.11	0.02	...	...	...	...	1	0.13	?	Nil	?	4.96	?
			Durgapur	0.00	1.30	0.70	...	...	...	...	...	?	?	?	?	?	?
			Sherpur	...	1.00	...	...	...	1.85	...	2	2.85	?	1.85	?	0.31	?
			Dhewanganj	...	...	...	...	...	...	...	...	?	?	?	?	?	?
			Madaripur	...	0.00	0.39	...	0.10	...	1.26	3	1.84	1.72	1.26	0.63	2.76	4.62
		Backergunge	Faridpur	...	0.28	...	0.75	0.41	...	...	3	1.44	2.70	Nil	0.82	3.92	5.80
			Goalundo	...	...	...	0.40	...	...	...	...	1.64	?	0.79	?	4.42	?
			Putuakhali	...	...	1.15	...	0.61	...	...	2	1.76	2.43	Nil	0.90	1.88	5.40
			Pirojpur	...	...	...	0.20	1.81	...	1.12	3	3.13	1.42	1.14	0.54	4.12	3.95
			Barisal	...	...	0.75	...	3.07	...	...	2	3.82	2.91	Nil	0.49	5.17	4.50
CHITTAGONG.	Chittagong.	Hill Tippera	Gauranadi	...	0.06	...	...	0.30	...	...	2	?	?	?	?	?	?
			Bhola	...	...	0.56	0.11	0.45	...	...	3	1.12	2.02	Nil	0.84	1.86	4.59
			Daulatkhan	...	...	0.20	1.10	3.97	...	0.08	3	5.85	?	0.08	?	5.59	?
			Bauphal	...	...	0.62	...	2.82	...	...	2	3.44	?	?	?	?	?
		Tippera	Agartala	...	1.30	1.90	0.40	...	...	0.60	4	4.20	2.97	0.60	1.06	6.95	5.26
			Comilla	...	...	0.50	0.53	0.20	0.07	...	4	4.12	3.68	2.82	0.91	5.76	5.46
			Chandpur	0.64	1.08	...	...	...	...	2.82	2	1.72	2.47	Nil	0.82	4.46	4.14
			Brahmanbaria	...	0.75	1.25	...	...	...	...	2	2.00	2.23	Nil	0.85	9.86	5.25
			Ramchandrapur	0.70	...	...	...	...	...	0.59	2	1.20	?	0.50	?	4.05	?
CHITTAGONG.	Chittagong.	Noakhali	Nasirnagar	...	1.70	1.50	0.70	...	...	...	2	3.53	?	?	?	?	?
			Daudkandi	...	0.33	3.20	...	...	...	...	2	5.30	?	Nil	?	5.60	?
			Kasba	1.90	1.40	2.00	...	...	...	...	3	5.30	?	?	?	?	?
			Laksam	...	1.09	0.59	3.60	...	...	...	...	?	?	?	?	?	?
		Chittagong	Noakhali	...	0.01	0.04	1.74	2.03	...	0.01	2	3.83	2.73	0.01	1.10	4.77	5.90
			Penny	...	0.03	1.03	0.53	1.12	0.33	...	5	3.85	3.69	0.91	1.33	7.01	6.28
			Harishpur	...	0.10	2.11	2.12	2.36	...	0.91	...	?	?	?	?	?	?
			Ramganj	...	...	0.36	1.68	1.69	...	...	3	3.73	?	Nil	?	5.48	?
			Cox's Bazar	0.11	0.34	1.07	1.67	1.80	0.03	...	5	5.02	2.68	0.03	1.11	14.08	6.60
CHITTAGONG.	Chittagong.	South Lushai Hills.	Chittagong	...	0.20	2.08	0.18	2.30	0.42	...	5	5.18	2.86	Nil	1.01	13.50	11.55
			Kutubdia	...	0.28	5.36	1.36	...	...	...	5	?	?	?	?	?	?
			Salkanya	...	0.08	0.92	1.65	1.54	1.80	0.50	...	?	?	?	?	?	?
			Kodala	...	...	...	...	...	...	...	...	?	?	?	?	?	?
			Fenosa	...	...	...	...	...	...	...	...	?	?	?	?	?	?
		Patna	Mirsarai	...	0.09	0.69	1.18	0.56	...	0.07	4	3.36	?	0.84	?	5.90	?
			Chandpur	...	1.20	1.13	...	1.80	2.01	0.77	...	?	?	?	?	?	?
			Rangamatia	...	0.09	1.48	1.56	2.05	2.77	0.18	5	8.22	2.64	0.27	0.94	12.16	5.32
			Bundarban	...	...	1.43	0.21	1.13	1.65	0.03	5	4.75	?	0.33	?	10.84	?
			Patna	...	...	...	...	...	...	...	Nil	Nil	0.97	Nil	0.07	Nil	1.57
CHITTAGONG.	Chittagong.	Gaya	Dinapore	...	...	...	...	0.15	0.02	...	1	0.17	0.76	0.02	0.06	Nil	1.22
			Bihar	...	...	...	...	...	0.06	...	Nil	0.06	0.77	0.06	0.29	Nil	1.61
			Barh	...	...	...	...	...	...	...	Nil	0.61	0.81	Nil	0.13	Nil	1.47
			Bikram	...	...	...	...	...	0.12	...	1	0.12	?	0.12	?	0.12	?
			Hilsa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Shahabad	Aurangabad	...	...	...	...	...	...	...	Nil	Nil	0.70	Nil	0.10	Nil	1.40
			Gaya	...	...	...	...	...	...	...	Nil	Nil	0.43	Nil	0.09	Nil	1.46
			Nawadah	...	...	...	...	0.23	...	...	1	0.23	0.54	0.23	0.12	0.23	1.54
			Jahanabad	...	...	...	...	0.09	...	...	Nil	0.09	0.94	0.09	0.22	0.09	1.53
			Arwal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
CHITTAGONG.	Chittagong.	Shahabad	Daudnagar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
			Sherphati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
			Rajauli	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
			Pakri Barawan.	...	...	...	...	0.24	...	...	?	?	?	?	?	?	?
		Saran	Buxar	...	...	...	...	...	...	...	Nil	Nil	0.52	Nil	0.03	Nil	0.66
			Dehri	...	...	...	...	...	...	...	Nil	Nil	1.05	Nil	0.02	Nil	1.18
			Bhabhua	...	...	...	...	...	...	...	Nil	Nil	0.34	Nil	0.12	Nil	0.73
			Sasaram	...	...	...	...	...	...	...	Nil	Nil	0.48	Nil	0.11	Nil	0.78
			Arrah	...	...	...	...	0.30	...	...	Nil	Nil	0.81	?	0.07	?	1.20
CHITTAGONG.	Chittagong.	Saran	Mohanea	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
			Khiri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
			Ageon	...	...	...	...	...	0.18	...	1	0.18	?	?	?	?	?
			Ramagar	...	...	...	...	...	1.50	...	1	1.50	?	?	?	?	?
			Koeth	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?
		Champan...	Sikrout	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?
			Bassowan	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?
			Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?
			Gopalganj	...	...	...	...	0.30	...	...	1	0.30	0.39	Nil	0.06	0.30	1.32
			Siwan	...	...	...	...	...	...	...	Nil	Nil	0.57	Nil	0.07	?	1.19
CHITTAGONG.	Chittagong.	Muzaffarpur	Ekma	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?
			Chapra	...	...	...	...	...	0.06	...	Nil	0.06	0.77	0.06	0.15	0.06	1.09
			Seerampur	...	...	...	...	...	...	...	?	?	?	?	?	?	?
			Annour	...	...	...	...	0.42	...	...	?	?	?	?	?	?	?
			Basantpur	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		Darbhanga	Motihari	...	...	...	...	0.73	0.39	...	2	1.12	0.90	0.39	0.39	1.12	1.83
			Bettiah	...	...	...	...	...	0.52	...	1	0.52	0.69	0.52	0.27	?	1.51
			Bagaha	...	...	...	...	...	0.74	...	?	?	?	?	?	?	?
			Burhura	...	...	...	...	...	0.11	...	1	0.11	?	?	?	?	?
			Sitamarhi	...	...	...	...	...	0.36	...	1	0.36	0.78	0.36	0.15	?	1.51
CHITTAGONG.	Chittagong.	Muzaffarpur	Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0.83	0.19	0.05	?	1.56



## Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 2nd of June 1894—concl'd.

Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1894.	Average rainfall from 16th May to date.	
			Sunday, 27th May.	Monday, 28th May.	Tuesday, 29th May.	Wednesday, 30th May.	Thursday, 31st May.	Friday, 1st.	Saturday, 2nd.								
BIHAR—concluded.	Bhagalpur—concluded.	Bhagalpur ...	...	...	...	...	...	...	0'49	1	0'49	1'15	0'49	0'16	0'49	2'47	
		Bhagalpur ...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?	?	
		Purnea ...	...	...	...	...	...	...	0'82	1	0'82	2'30	0'82	0'41	0'82	4'37	
		Purnea ...	...	...	...	...	...	...	0'21	0'89	2	1'10	1'79	1'10	0'16	1'10	3'09
		Purnea ...	...	...	...	...	...	...	0'20	0'50	2	0'70	?	0'50	?	0'70	?
		Purnea ...	...	...	...	...	...	...	0'23	0'09	1	0'32	?	0'32	?	0'32	?
		Purnea ...	...	...	...	...	...	...	0'46	1	0'44	?	0'46	?	1'24	?	
		Purnea ...	...	...	...	...	...	...	0'75	1	0'75	?	0'75	?	1'43	?	
		Malda ...	...	...	...	...	...	...	0'04	...	Nil	0'04	1'61	0'04	0'44	0'24	2'89
		Malda ...	...	...	...	...	...	...	0'32	...	1	0'32	1'20	0'32	0'30	0'32	3'29
	Sonthal Parganas.	...	...	...	...	...	...	...	0'12	...	1	0'12	?	0'12	?	0'04	?
		...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	0'25	?
		...	...	...	...	...	...	...	0'06	Nil	0'06	1'69	0'06	0'29	0'15	3'07	
		...	...	...	...	...	...	...	...	Nil	Nil	1'48	Nil	0'13	Nil	2'42	
		...	...	...	...	...	...	...	2'19	...	1	2'19	2'02	Nil	0'31	2'19	3'31
		...	...	...	...	...	...	...	0'38	...	1	0'38	1'14	0'38	0'15	0'38	2'36
		...	...	...	...	...	...	...	0'46	...	1	0'46	0'94	0'46	0'11	0'46	1'86
		...	...	...	...	...	...	...	0'51	...	1	0'51	1'09	0'51	0'29	0'51	2'24
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
ORISSA.	Cuttack ...	...	...	...	...	...	...	...	0'06	...	Nil	0'06	1'69	0'06	0'29	0'15	3'07
		...	...	...	...	...	...	...	...	Nil	Nil	1'48	Nil	0'13	Nil	2'42	
		...	...	...	...	...	...	...	...	...	1	2'19	2'02	Nil	0'31	2'19	3'31
		...	...	...	...	...	...	...	0'38	...	1	0'38	1'14	0'38	0'15	0'38	2'36
		...	...	...	...	...	...	...	0'46	...	1	0'46	0'94	0'46	0'11	0'46	1'86
		...	...	...	...	...	...	...	0'51	...	1	0'51	1'09	0'51	0'29	0'51	2'24
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
	Balasore ...	...	...	...	...	...	...	...	0'16	...	Nil	0'16	?	0'16	?	?	?
		...	...	...	...	...	...	...	0'11	...	1	0'11	?	Nil	?	0'11	?
		...	...	...	...	...	...	...	0'06	...	Nil	0'06	?	Nil	?	0'06	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
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		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
		...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?
Puri ...	...	...	...	...	...	...	...	0'04	0'03	Nil	0'07	0'32	0'07	0'09	0'07	1'55	
	...	...	...	...	...	...	...	0'19	...	...	0'88	0'23	0'23	?	2'33	?	
	...	...	...	...	...	...	...	0'76	...	...	0'49	0'21	0'21	?	0'94	?	
	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
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	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
Hazariabagh ...	...	...	...	...	...	...	...	0'67	...	1	0'67	0'79	0'67	0'27	0'67	1'77	
	...	...	...	...	...	...	...	0'05	...	Nil	0'05	0'84	0'05	0'14	0'05	1'67	
	...	...	...	...	...	...	...	...	...	...	0'56	0'12	?	?	?	?	
	...	...	...	...	...	...	...	...	...	...	0'82	0'16	?	?	?	?	
	...	...	...	...	...	...	...	...	...	...	1'03	0'09	?	?	?	?	
	...	...	...	...	...	...	...	0'24	...	1	0'24	?	0'24	?	0'24	?	
	...	...	...	...	...	...	...	...	...	1	0'17	?	0'17	?	0'17	?	
	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
Lohardaga ...	...	...	...	...	...	...	...	...	...	Nil	Nil	0'39	Nil	0'10	Nil	1'84	
	...	...	...	...	...	...	...	...	...	1	0'26	1'01	0'23	0'08	10'30	2'03	
	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
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Palamau ...	...	...	...	...	...	...	...	...	...	Nil	Nil	0'67	Nil	0'12	Nil	1'21	
	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
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	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
Manbhum ...	...	...	...	...	...	...	...	...	...	Nil	Nil	0'84	Nil	0'21	Nil	2'06	
	...	...	...	...	...	...	...	...	...	1	0'15	0'64	Nil	0'21	0'15	1'34	
	...	...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?	
	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
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Singbhum ...	...	...	...	...	...	...	...	...	...	0'01	0'86	1'02	0'87	0'22	0'87	2'65	
	...	...	...	...	...	...	...	...	...	0'20	0'25	0'05	0'30	?	?	?	
	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
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**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING 8 A.M., SATUR-  
DAY, THE 2ND OF JUNE 1894.**

DURING practically the whole of the previous week a barometric depression had been lying over Bengal and parts of Assam, the greatest defects being reported along the foot of the hills. On the 27th of May, or the first day of the week under review, pressure was falling slowly, but the decrease was largest at the south-western and western stations. The depression over Bengal was still very pronounced on the 27th, and in the centre of the province and over a considerable part of Bihar a defect of more than 0.25" was registered. From the 28th, however, the depression began to fill up, and a rapid increase of pressure was reported, the rise exceeding a tenth of an inch at some of the north-eastern stations, and the seat of largest defect was thus transferred in a south-westerly direction. On the 29th the rapid increase of pressure continued, and over a large part of Bihar and parts of Central Bengal the increase was again larger than a tenth of an inch. A further but not quite so rapid increase occurred on May 30th, but on this day at the eastern stations in Assam pressure was beginning to fall. These changes had the effect of driving the low-pressure area again in a south-westerly or southerly direction, and while on the 30th the pressure over the greater part of Bengal had become fairly normal, a distinct low-pressure area had drifted over parts of South-West Bengal and over Orissa. On the 31st the rise of pressure continued over the western and south-western parts of the province, though the falling pressure had extended from Assam over the eastern parts of Bengal, and on the 31st the low-pressure area had drifted down the west coast of the Bay, and probably extended towards the centre of the Bay itself. The changes on June 1st and 2nd rather tended to establish the previous pressure conditions, for pressure began to fall in all districts, the fall being largest in the north of the province. Hence at the close of the week pressure had again become in defect by amounts ranging up to about 0.08 inch at the western stations.

During the earlier part of the week, while the depression occupied the north and centre of the province, the conditions which had obtained in the previous week continued to hold good. That is, to the east and south-east of the depression weather was unsettled and numerous rain storms were occurring, so that the eastern districts of Bengal and Assam were receiving considerable amounts of rain, and temperature was hence decidedly low. On the other hand, over the area occupied by the depression and to the west and south of it, weather was fine and practically rainless, and unusually high temperature was experienced. As an instance it may be mentioned that the temperature reported on the morning of May 28th showed that while at the extreme eastern stations the mean temperature of the previous 24 hours had been in defect by amounts ranging up to 6.9° at Sibsaigar, over Bengal generally temperature was in large excess, by amounts ranging up to the exceedingly large amount of 16.2° at Bankura. On this morning no less than 15 stations reported maximum temperatures of 110° and upwards, while at Bankura a temperature of no less than 117.1° was reported, which is no less than 23.3° above the normal maximum temperature of that day. As the depression began to drift south-westwards and southwards the conditions changed with it, a wave of comparatively cool weather with rain storms began to flow over the province from east to west, reaching as far as South-West Bengal on the 30th and 31st May, while the rainfall reached parts of Bihar about June 1st. As stated above, however, conditions again began to revert to the former state of things at the close of the week, and hence rainfall ceased at this time in the western and south-western districts, and temperature again began to increase.

*Pressure.*—The mean pressure for the week has been in defect of the normal, the usual defect equalling nearly a tenth of an inch, and indeed at some stations slightly exceeding this amount, particularly in South-West Bengal and Orissa, where the largest defects have been registered.

*Temperature.*—Has been excessive in the western districts, the excess in Chota Nagpur equalling 7.1° and in South-West Bengal 4.1°, while it has been more nearly normal in North Bengal. In East Bengal a decided defect has been registered, while in Assam the defect has equalled no less than 3.7°. For the whole of Bengal the variation for the week has equalled an excess of nearly 3°.

*Rainfall.*—East Bengal has received an average fall of nearly three inches, South-West Bengal and North Bengal of nearly an inch, and Orissa a fall of half an inch. Bihar and Chota Nagpur have received the smallest falls, and have averaged rather less than a third of an inch. The fall in East Bengal has been distinctly above the normal amount, but in all other divisions the falls have been rather largely in defect of the normal.



The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the week ending Saturday, the 2nd of June 1894:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 10th May 1894.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Vefrage.	Normal average.
South-West Bengal	117.4	71.4	100.7	80.6	90.7	+4.1	0.83	1.57	-0.74	1.29	1.94	-0.65	0.19	0.44	0.99	3.15
North Bengal	105.0	70.1	91.1	55.0	83.1	+0.8	0.92	2.95	-2.03	4.43	2.57	-1.14	0.40	0.88	3.29	6.19
East Bengal	95.5	68.6	87.9	75.5	81.7	+0.9	2.68	2.42	+0.26	2.96	2.77	+0.19	0.42	0.91	6.85	6.25
Bihar	114.7	70.2	103.1	79.0	91.1	+3.3	0.39	0.99	-0.69	0.54	1.05	-0.51	0.21	0.17	0.31	1.85
Orissa	111.3	67.0	95.0	80.4	88.0	+2.7	0.58	1.03	-0.45	1.25	1.52	-0.27	0.47	0.53	1.10	2.47
Chota Nagpur	117.8*	72.9*	106.4*	81.2*	93.9*	+7.1*	0.25	0.84	-0.59	0.50	1.25	-0.75	0.23	0.16	0.25	1.76
Assam	95.0	68.0	83.8	71.0	77.4	-3.7										

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 5th June 1894.

A. PEDLER,  
Meteorological Reporter to the Govt. of Bengal.

### Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 27th May to 2nd June 1894.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Falt.	TEMPERATURE.					HYGROMETRY.				Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1894.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
May	27th	29.481	90.4	98.0	15.2	82.8	93.6	84.5	1.063	81.2	68	Nil
"	28th	29.489	91.0	98.2	14.5	83.7	93.6	84.5	1.063	81.2	68	"
"	29th	29.539	90.4	97.0	13.3	83.7	91.6	83.0	1.014	79.7	69	"
"	30th	29.579	90.2	98.5	16.7	81.8	93.1	83.5	1.018	79.8	66	"
"	31st	29.630	83.2	91.0	15.7	75.3	85.6	81.5	1.021	79.9	84	0.35
June	1st	29.637	87.2	96.0	17.7	78.3	88.6	81.5	0.981	78.7	73	"
"	2nd	29.598	87.6	98.0	20.8	77.2	91.1	80.5	0.899	76.0	62	0.07

The mean 10 A.M. pressure of the seven days ... 29.565 Inches.

The mean temperature of the seven days ... 88.6

The extreme variation of temperature ... 23.2

The maximum temperature ... 98.5

The mean 10 A.M. relative humidity of the seven days ... 70%

The total fall of rain from 27th May to 2nd June 1894 ... 0.42 Inches.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,  
The 4th June 1894.



## Results of the Meteorological Observations taken at the Alipore Observatory from 27th May to 2nd June 1894.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.	
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.			
1894.		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.		
May	27th	149.7	9.1	29.428	89.4	96.5	12.8	83.7	82.9	1.042	80.5	76	SSW	...	368	Nil	Partially cloudy.
"	28th	148.8	8.2	.454	89.6	96.6	12.4	84.2	82.8	1.033	80.2	75	SSW and S	...	314	"	Partially cloudy, o.
"	29th	151.0	6.0	.502	89.5	95.3	10.8	84.5	82.6	1.022	79.9	74	S, SW and SSW		255	"	Chiefly cloudy, o.
"	30th	152.7	5.0	.550	86.0	97.3	15.2	82.1	80.3	0.963	78.1	78	S by E, SSW and variable.		119	0.26	Chiefly cloudy, o, g. t, p.
"	31st	145.5	4.1	.571	83.1	88.6	14.2	74.4	78.9	.931	77.1	83	SSE and calm	...	95	0.04	Chiefly cloudy, o, d.
June	1st	153.5	7.2	.578	84.1	94.5	16.5	78.0	79.0	.924	76.8	80	SSE, S by E and variable.		79	0.10	Partially cloudy, p, t.
"	2nd	151.9	10.9	.531	87.1	96.9	20.3	76.6	79.3	.898	76.0	72	SSW and SSE	...	105	Nil	Day chiefly clear, night chiefly cloudy, o.

The mean pressure of the seven days ... .. Inches. 29.516

The average pressure of the corresponding period for 24 years, Surveyor-General's Office ... .. 29.585

The total number of hours of bright sunshine ... .. Hours. 50.5

The maximum possible number of hours of sunshine ... .. 93.5

The mean temperature of the seven days ... .. 87.0

The average temperature of the corresponding period for 24 years, Surveyor-General's Office ... .. 86.5

The extreme variation of temperature ... .. 22.9

The maximum temperature ... .. 97.3

The highest velocity of the wind in one hour ... .. Miles. 20

The mean relative humidity ... .. % 77

The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office ... .. 75

The total fall of rain from 27th May to 2nd June 1894 ... .. Inches. 0.40

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 1.51

The total fall from 1st January to 2nd June 1894 ... .. 8.36

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 9.99

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; t, thunder; p, passing temporary showers; d, drizzling rain.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 4th June 1894.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.



CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 2nd June 1894, as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 2ND JUNE 1894.			WEEK ENDING SATURDAY, THE 3RD JUNE 1893.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	279	40,650	456	168	25,625	379
Jute ...	14	7,375	111	3	1,150	19
Firewood ...	71	59,625	802	48	17,950	274
Other articles ...	520	1,16,860	1,710	690	1,59,675	2,349
Total ...	884	2,24,610	3,079	909	2,04,400	3,021



## EASTERN BENGAL STATE RAILWAY.

*Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of March 1894, as compared with the same month of the previous year*

STAPLES.	1894.		1893.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1894.	1893.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal and Coke carried for the Public and Foreign Railways.	5,469	21,742	4,900	31,951	27,211	36,581	.....	9,640
Cotton, raw	1	478	90	576	479	625	.....	146
Cotton, manufactured—								
Twist and yarn, European	213	.....	.....	.....	.....	.....	.....	.....
Ditto, Indian	268	.....	.....	.....	.....	.....	.....	.....
Piece-goods, European	1,485	5	2,249	398	1,998	2,647	.....	649
Ditto, Indian	22	5	.....	.....	.....	.....	.....	.....
Drugs and Chemicals—								
Intoxicating, other than opium	12	3	.....	.....	.....	.....	.....	.....
Non-intoxicating—								
Cinchona bark	.....	8	.....	.....	63	.....	63	.....
Others	40	.....	.....	.....	.....	.....	.....	.....
Dyes and Tans—								
Indigo	.....	.....	.....	.....	.....	.....	.....	.....
Myrabolams	.....	.....	.....	.....	.....	.....	.....	.....
Cutch	21	.....	.....	.....	216	.....	216	.....
Turmeric	10	177	.....	.....	.....	.....	.....	.....
Aniline dyes	.....	.....	.....	.....	.....	.....	.....	.....
Others	7	1	.....	.....	.....	.....	.....	.....
Grain and pulse—								
Wheat	20	22	.....	.....	.....	.....	.....	.....
Rice in the husk	3,193	7,951	.....	.....	.....	.....	.....	.....
Rice not in the husk	6,153	1,846	3,025	4,867	7,999	7,892	107	.....
Jawar and bajra	.....	.....	.....	.....	.....	.....	.....	.....
Gram and pulse	970	2,520	.....	.....	.....	.....	.....	.....
Others	34	116	3,255	8,675	14,826	11,930	2,896	.....
Hides and skins—								
Hides of cattle—								
Dressed or tanned	.....	.....	.....	.....	.....	.....	.....	.....
Raw	5	896	72	957	901	1,029	.....	128
Skins of sheep, &c.—								
Dressed or tanned	.....	.....	.....	.....	.....	.....	.....	.....
Raw	3	.....	.....	.....	3	.....	3	.....
Horns	.....	.....	.....	.....	.....	.....	.....	.....
Jute—								
Raw	281	8,092	561	16,344	8,373	10,905	.....	2,532
Gunnybags and cloth	279	901	788	1,479	1,180	2,267	.....	1,087
Lac—								
Stick	.....	.....	.....	.....	.....	.....	.....	.....
Shell	2	9	.....	.....	11	.....	11	.....
Leather, manufactured	14	.....	.....	.....	14	.....	14	.....
Liquors—								
Beer	20	.....	.....	.....	.....	.....	.....	.....
Spirits	.....	.....	.....	.....	.....	.....	.....	.....
Wines	51	.....	.....	.....	71	.....	71	.....
Metals—								
Copper, unwrought	.....	.....	.....	.....	.....	.....	.....	.....
Brass, do.	9	.....	.....	.....	.....	.....	.....	.....
Copper, wrought	.....	.....	.....	.....	.....	.....	.....	.....
Brass, do.	125	34	1,628	465	1,412	2,093	.....	621
Iron	1,613	8	.....	.....	.....	.....	.....	.....
Others	203	20	.....	.....	.....	.....	.....	.....
Oils—								
Kerosine	5,025	13	504	76	5,038	580	4,458	.....
Castor	9	.....	.....	.....	.....	.....	.....	.....
Cocoonaut	57	.....	.....	.....	.....	.....	.....	.....
Others	522	32	310	63	620	373	247	.....
Oilseeds—								
Linseed	.....	3,366	.....	.....	.....	.....	.....	.....
Rape and mustard	825	1,056	.....	.....	.....	.....	.....	.....
Til or jinli	.....	74	.....	.....	.....	.....	.....	.....
Poppy	.....	.....	4,806	7,150	4,942	12,356	.....	7,414
Earth-nuts	.....	.....	.....	.....	.....	.....	.....	.....
Castor	.....	.....	.....	.....	.....	.....	.....	.....
Others	39	82	.....	.....	.....	.....	.....	.....
Opium	.....	.....	.....	.....	.....	.....	.....	.....
Paper and pasteboard	53	328	.....	.....	380	.....	380	.....
Provisions—								
Ghee	43	2	.....	.....	.....	.....	.....	.....
Dried fruits and nuts	.....	.....	693	836	867	1,529	.....	662
Others	483	639	.....	.....	.....	.....	.....	.....
Railway plant and rolling-stock carried for the Public and Foreign Railways—								
Locomotives, engines and tenders and parts thereof	.....	.....	.....	.....	.....	.....	.....	.....
Carriages and trucks and parts thereof	.....	.....	.....	.....	.....	.....	.....	.....
Materials—								
Steel rails and fish-plates, sleepers and keys of steel and cast-iron	.....	.....	.....	.....	24	.....	24	.....
Other sorts	24	.....	.....	.....	.....	.....	.....	.....
Salt	917	27	3,394	103	944	3,497	.....	2,553
Saltpetre, &c.—								
Saltpetre	.....	.....	.....	.....	.....	.....	.....	.....
Other saline substances	.....	.....	.....	.....	.....	.....	.....	.....
Silk, raw—								
Foreign	.....	.....	.....	.....	.....	.....	.....	.....
Indian	.....	20	.....	.....	20	.....	20	.....

STAPLES.	1894.		1893.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1894.	1893.		
Silk piece-goods—								
Foreign	.....	.....	.....	.....	.....	.....	.....	.....
Indian	.....	.....	.....	.....	.....	.....	.....	.....
Spices—								
Betel-nuts	323	402	130	2,102	815	2,232	.....	1,417
Pepper	72	.....	.....	.....	.....	.....	.....	.....
Ginger	.....	52	.....	.....	.....	.....	.....	.....
Chillies	714	38	.....	.....	.....	.....	.....	.....
Cardamoms	.....	9	.....	.....	.....	.....	.....	.....
Others	68	9	.....	.....	962	.....	962	.....
Stone and lime	640	1,229	.....	.....	1,869	.....	1,869	.....
Sugar—								
Refined or crystalized, including sugar-candy.	212	1	1,835	3,034	3,774	4,869	.....	1,095
Unrefined, viz., molasses and jaggery or gur, and other saccharine produce.	1,903	1,638	.....	.....	.....	.....	.....	.....
Tea—								
Foreign	.....	.....	.....	.....	.....	.....	.....	.....
Indian	5	9	.....	27	14	27	.....	.....
Timber	302	248	189	277	550	406	84	13
Tobacco—								
Unmanufactured	55	1,078	.....	.....	.....	.....	.....	.....
Manufactured—			2,198	1,304	1,140	3,502	.....	2,362
Cigars	.....	.....	.....	.....	.....	.....	.....	.....
Other sorts	4	3	.....	.....	.....	.....	.....	.....
Wool, raw	.....	73	.....	.....	73	.....	73	.....
Wool, manufactured—								
Piece-goods, European	.....	.....	.....	.....	.....	.....	.....	.....
Ditto, Indian	.....	.....	.....	.....	.....	.....	.....	.....
Shawls	.....	.....	.....	.....	.....	.....	.....	.....
All other articles of merchandise	7,178	2,943	10,010	3,341	10,121	13,351	.....	3,230
Total	38,895	58,015	40,596	78,425	96,910	119,021	11,498	33,609

*Statement of principal commodities carried on the Eastern Bengal State Railway during the month of March 1894.*

## INCREASES.

Kerosine oil	Tons.	Stone and lime	Tons.
Market fluctuation.	4,458	Large despatches from E. I. R. to Baraset, Budge-Budge and Kanaghat stations.	1,869

## DECREASES.

Coal and coke	Tons.	Salt	Tons.
Due to smaller consignments to Bracebridge Hall.	9,640	Due to despatches from E. I. R. to Bihar Section stations <i>via</i> Maniharighat having been less during this month than in the corresponding month last year.	2,553
Jute, raw	2,532	Betelnuts	1,417
Most of the jute-booking stations on the Northern and Bihar Sections and Serajganj show decrease under this head. There was an inclination to hold stocks up-country, the Calcutta markets being unsatisfactory.		Due to less despatches from B. C. Flotilla stations owing to damage done by storms.	
Gunnybags and cloth	1,087	Sugar	1,095
The decrease is chiefly in despatches from Serajganj and Kankinara.		The decrease is chiefly in despatches from Cossipore, Alandanga and Kishanganj Bazar.	
Oilseeds	7,414	Tobacco	2,362
Goalundo, Serajganj and most of the Northern and Bihar Section stations show decrease under this head due to short crop.		Falling off in despatches from stations on the Northern and Bihar Sections, due to unfavourable market.	

Calcutta, the 2nd June 1894.

F. L. N. BEAVER,  
for Examiner of Accounts.

## BENGAL CENTRAL RAILWAY.

*Abstract of principal commodities carried over the Bengal Central Railway during the month of March 1894, as compared with the same month of the previous year.*

STAPLES.	1894.		1893.		TOTAL.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1894.	1893.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal and Coke carried for the Public and Foreign Railways.	2,819	.....	2,671	.....	2,819	2,671	148	.....
Cotton, manufactured—								
Twist and yarn, European ... ..	84	.....	409	21	266	430	.....	164
Ditto, Indian ... ..	4	.....						
Piece-goods, European ... ..	174	.....						
Ditto, Indian ... ..	.....	4						
Drugs and Chemicals—								
Intoxicating, other than Opium ... ..	.....	.....						
Non-intoxicating—								
Cinchona Bark ... ..	.....	.....			1	.....	1	.....
Others ... ..	1	.....						
Dyes and Tans—								
Indigo ... ..	.....	.....						
Myrabolams ... ..	.....	.....						
Cutch ... ..	2	.....						
Turmeric ... ..	3	99			104	.....	104	.....
Auline Dyes ... ..	.....	.....						
Others ... ..	.....	.....						
Gram and pulse—								
Wheat ... ..	.....	.....						
Rice in the husk ... ..	41	6	166	177	523	343	180	.....
Do. not in the husk ... ..	511	12						
Jawar and Bajra ... ..	.....	.....						
Gram and pulse ... ..	12	934						
Others ... ..	.....	.....						
Hides and skins—			122	1,136	993	258	.....	265
Hides of cattle—								
Dressed or tanned ... ..	.....	.....						
Raw ... ..	.....	.....						
Skins of sheep, &c.—				51	66	51	15	.....
Dressed or tanned ... ..	.....	66						
Raw ... ..	.....	.....						
Jute—								
Raw ... ..	.....	48		190	48	190	.....	142
Gunny bags and cloth ... ..	21	1	35	2	22	37	.....	15
Leather, manufactured ... ..	3	.....			3	.....	3	.....
Liquors—								
Beer ... ..	.....	.....						
Spirits ... ..	.....	.....						
Wines ... ..	3	.....			3	.....	3	.....
Metals—								
Copper, unwrought ... ..	.....	.....						
Brass, ditto ... ..	.....	.....						
Copper, wrought ... ..	.....	.....						
Brass, ditto ... ..	10	7	99	38	102	137	.....	35
Iron ... ..	55	.....						
Others ... ..	19	11						
Oils—								
Kerosine ... ..	85	2	218	.....	87	218	.....	131
Castor ... ..	.....	.....						
Cocconut ... ..	7	.....						
Others ... ..	160	.....	225	.....	167	225	.....	58
Oilseeds—								
Linseed ... ..	4	712						
Rape and mustard ... ..	123	68						
Til or gingelly ... ..	.....	.....						
Poppy ... ..	.....	.....	240	1,022	897	1,262	.....	365
Earth-nuts ... ..	.....	.....						
Castor ... ..	.....	.....						
Others ... ..	.....	.....						
Paper and pasteboard ... ..	5	.....			5	.....	5	.....
Provisions—								
Ghee ... ..	2	.....						
Dried fruits and nuts ... ..	.....	.....						
Others ... ..	517	83	198	293	602	491	111	.....
Railway Plant and Rolling-stock carried for the Public and Foreign Railways—								
Locomotives, engines and tenders and parts thereof—								
Carriages and trucks and parts thereof ... ..	.....	.....						
Materials—								
Steel rails and fish-plates, sleepers and keys of steel and cast iron, ... ..	.....	.....						
Other sorts ... ..	.....	.....						
Salt ... ..	310	.....	290	.....	310	290	20	.....
Spices—								
Betel-nuts ... ..	25	515		1,877	540	1,877	.....	1,337
Pepper ... ..	.....	.....						
Ginger ... ..	.....	.....						
Chillies ... ..	74	5						
Cardamoms ... ..	.....	.....						
Others ... ..	2	.....			81	.....	81	.....
Stone and lime ... ..	727	.....			727	.....	727	.....
Sugar—								
Refined or crystallized, including sugar-candy.	2	.....						
Unrefined, viz., molasses and jaggery or gur, and other saccharine produce.	9	1,114	211	2,257	1,125	2,468	.....	1,343
Timber ... ..	64	1			65	.....	65	.....
Tobacco—								
Unmanufactured ... ..	16	11						
Manufactured—								
Cigars ... ..	.....	.....	65	50	30	115	.....	85
Other sorts ... ..	3	.....						
All other articles of merchandise ... ..	307	305	665	383	1,612	1,048	.....	436
Total ... ..	6,204	3,994	5,614	7,497	10,198	13,111	1,463	4,376

*Statement of principal commodities carried on the Bengal Central Railway during the month of March 1894.*

## INCREASES.

Stone and lime ... .. 727 Tons.  
Due to despatches of road metal to Baraset.

## DECREASES.

Betel-nuts ... .. 1,337 Tons.  
The decrease is chiefly in despatches from the Flotilla Stations viz Khulna, the crop being defective owing to damage done by storms.

Sugar ... .. 1,343  
Due to short outturn of the Tarpur Sargar Works.

CALCUTTA, the 2nd June 1894.

F. L. N. BEAVER,  
for Examiner of Accounts.



# SUPPLEMENT TO THE CALCUTTA GAZETTE, JUNE 6, 1894.

## Weekly Return of Traffic Receipts on Indian Railways.

### EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 26th May 1894, on 1,659 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	299,329*	Rs. A. P. 2,83,658 4 0*	Mds. S. 30,43,081 10	Rs. A. P. 7,18,812 15 0	Rs. A. P. 18,278 15 0	Rs. A. P. 10,20,750 2 0	74,839½	132,610½	207,444
Or per mile of railway ...	.....	170 15 8	.....	433 4 6	11 0 4	615 4 6	.....	.....	.....
For previous 19½ weeks of half-year ...	6,728,645	74,13,472 4 0	6,76,34,948 20	1,49,64,354 6 0	3,58,215 3 0	2,27,36,041 13 0	1,587,090	2,549,093½	4,136,783½
Total for 20½ weeks ...	7,027,974	76,97,130 8 0	7,06,78,029 30	1,56,83,167 5 0	3,76,494 2 0	2,37,56,791 15 0	1,661,923½	2,682,303½	4,344,227½
COMPARISON.									
Total for corresponding week of previous year ...	278,433	2,60,242 5 1	31,93,410 0	7,11,423 5 8	19,910 11 10	9,91,576 6 7	73,299	132,337	205,636
Per mile of railway corresponding week of previous year ...	.....	161 9 5	.....	441 11 10	12 5 10	615 11 1	.....	.....	.....
Total for corresponding 21 weeks of previous year ...	6,144,964	66,92,549 9 2	6,47,32,636 0	1,47,25,581 1 9	4,15,762 7 6	2,18,33,893 2 5	1,621,529	2,488,030	4,109,559

\* The increase is presumably due to journeys of marriage parties.

### TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 26th May 1894, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	18,666	Rs. A. P. 4,633 0 0	Mds. S. 20,901 30	Rs. A. P. 721 5 0	Rs. A. P. 14 0 0	Rs. A. P. 5,388 5 0	874	94	968
Or per mile of railway ...	.....	209 2 0	.....	32 6 8	0 10 1	242 2 9	.....	.....	.....
For previous 19½ weeks of half-year ...	*484,227	*1,26,287 13 0	†3,76,237 20	†14,545 8 0	‡276 0 0	1,41,109 5 0	17,878	2,033	19,910
Total for 20½ weeks ...	502,893	1,30,940 13 0	3,97,139 10	15,266 13 0	290 0 0	1,46,497 10 0	18,752	2,126	20,878
COMPARISON.									
Total for corresponding week of previous year ...	17,734	4,662 15 11	5,100 10	215 8 0	14 7 6	4,892 15 5	891	77	968
Per mile of railway corresponding week of previous year ...	.....	209 9 2	.....	9 10 11	0 10 5	219 14 6	.....	.....	.....
Total for corresponding 21 weeks of previous year ...	487,341	1,27,918 11 0	2,48,096 20	8,509 8 0	227 10 6	1,36,653 13 6	18,789	2,183	20,972

\* Added number of passengers 41 and Rs. 292 } on account of difference between the approximate and audited figures for the week ended 21st April  
† Ditto Mds. 101 and deducted " 207 }  
‡ Ditto " 8 } 1894.

### DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for the week ended 26th May 1894, on 161½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	18,301	Rs. A. P. 13,423 8 0	Mds. S. 40,323 0	Rs. A. P. 7,389 15 0	Rs. A. P. 96 0 0	Rs. A. P. 20,969 7 0	5,693½	2,875½	8,569½
Or per mile of railway ...	.....	83 2 9	.....	45 12 7	0 9 6	129 8 10	.....	.....	.....
For previous 19½ weeks of half-year ...	*493,339	*3,79,070 13 0	†13,67,478 20	†1,88,792 15 0	‡1,607 0 0	5,69,470 12 0	116,342½	68,599½	184,941½
Total for 20½ weeks ...	513,730	3,92,494 5 0	14,07,801 20	1,96,182 14 0	1,703 0 0	5,90,380 3 0	122,636	71,475½	193,511½
COMPARISON.									
Total for corresponding week of previous year ...	20,639	13,649 9 5	94,064 20	6,950 14 0	44 9 6	20,645 0 11	6,449	3,490	9,939
Per mile of railway corresponding week of previous year ...	.....	84 9 1	.....	43 1 1	0 4 5	127 14 7	.....	.....	.....
Total for corresponding 21 weeks of previous year ...	398,032	2,96,846 12 7	15,45,618 10	1,92,598 2 3	903 12 6	4,90,438 11 4	123,406	68,532	191,938

\* Added number of passengers 6,031 and Rs. 2,754 } on account of difference between the approximate and audited figures for the week ended 21st April  
† Do. Mds. 20,546 and " 1,305 }  
‡ Deducted " 3 }

# SUPPLEMENT TO THE CALCUTTA GAZETTE, JUNE 6, 1894.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N.B., DACCA, K.-D., AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic for week ended 26th May 1894, on 813 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	187,260	93,000 0 0	7,31,370 0	92,400 0 0	176,300 0 0	2,62,393 0 0	29,796	24,031	53,767
Or per mile of railway ...	230	115 0 0	900 0	114 0 0	*74 0 0	303 0 0	.....	.....	.....
For previous 20 weeks of half-year ...	4,658,542	19,39,926 0 0	1,62,83,479 0	21,49,447 0 0	5,34,706 0 0	46,03,779 0 0	580,637	606,023	1,180,060
Total for 21 weeks ...	4,245,802	20,23,226 0 0	1,70,14,849 0	22,41,937 0 0	6,01,006 0 0	48,06,169 0 0	609,773	624,054	1,233,827
COMPARISON.									
Total for corresponding week of previous year ...	154,393	79,294 2 0	9,60,300 0	84,731 11 4	26,494 2 2	1,90,519 15 6	28,339	25,016	53,355
Per mile of railway corresponding week of previous year ...	199	102 0 0	1,244 0	109 0 0	*20 0 0	231 0 0	.....	.....	.....
Total to corresponding date of previous year ...	3,758,285†	17,91,773 13 9	1,60,78,068 0	19,67,929 15 3	3,44,811 8 4	41,04,615 5 4	600,694	596,602	1,197,266

\* Excluding steamer earnings.

† Audited up to 14th April 1894.

‡ Includes hire of vehicles credited to E. I. Railway.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 26th May 1894, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	31,870	11,100 0 0	61,280 0	3,580 0 0	60 0 0	14,740 0 0	3,900	1,980	5,880
Or per mile of railway ...	255	89 0 0	490 0	29 0 0	.....	118 0 0	.....	.....	.....
For previous 20 weeks of half-year* ...	662,408.	2,28,578 0 0	12,02,599 0	75,630 0 0	2,636 0 0	3,06,844 0 0	77,073	35,651	112,724
Total for 21 weeks ...	694,278	2,39,678 0 0	12,63,789 0	79,210 0 0	2,696 0 0	3,21,584 0 0	80,973	37,651	118,604
COMPARISON.									
Total for corresponding week of previous year ...	28,228	13,434 3 11	45,441 0	2,454 0 0	93 0 0	15,981 3 11	3,889	1,783	5,672
Per mile of railway corresponding week of previous year ...	226	107 0 0	364 0	20 0 0	1 0 0	128 0 0	.....	.....	.....
Total to corresponding date of previous year ...	659,435‡	2,31,849 3 1	14,52,051 0	89,088 10 6	2,555 3 2	3,23,493 0 9	77,982	41,294	119,276

\* Audited up to 14th April 1894.

## DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 26th May 1894, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,930	6,080 0 0	12,230 0	1,370 0 0	260 0 0	7,710 0 0	2,487	737	3,224
Or per mile of railway ...	208	71 0 0	142 0	16 0 0	3 0 0	90 0 0	.....	.....	.....
For previous 20 weeks of half-year* ...	407,836	1,30,583 0 0	4,64,244 0	44,171 0 0	4,095 0 0	1,78,849 0 0	49,381	15,125	64,506
Total for 21 weeks ...	425,766	1,36,663 0 0	4,76,474 0	45,541 0 0	4,355 0 0	1,86,559 0 0	51,868	15,862	67,730
COMPARISON.									
Total for corresponding week of previous year ...	13,784	4,474 0 0	10,507 0	891 0 0	339 0 0	5,794 0 0	1,619	1,513	3,132
Per mile of railway corresponding week of previous year ...	160	52 0 0	123 0	10 0 0	4 0 0	66 0 0	.....	.....	.....
Total to corresponding date of previous year ...	376,694	1,17,908 0 0	3,30,603 0	29,774 0 0	3,873 0 0	1,51,455 0 0	35,892	31,967	67,859

\* Audited up to 14th April 1894.

## BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIBHUT STATE RAILWAY.)

*Approximate Return of Traffic for the week ending 26th May 1894, on 756 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 756 miles open ...	116,880	Rs. 48,040	Mds. 5,15,770	Rs. (b) 73,870	Rs. (c) 14,010	Rs. 1,35,920	12,890	21,965	34,855
Or per mile of railway ...	153.94	63.55	682.24	97.71	18.53	179.79	.....	.....	.....
For previous 19½ weeks of half-year (a) ...	2,155,207	9,37,969	88,06,841	12,73,128	2,40,041	24,51,138	283,088	379,490	662,578
Total for 20½ weeks ...	2,271,887	9,86,009	93,22,611	13,46,998	2,54,051	25,87,058	295,978	401,455	697,433
COMPARISON.									
Total for corresponding week of previous year on 756 miles open ...	108,526	45,705	5,60,635	79,439	18,370	1,43,715	14,825	22,148	36,973
Per mile of corresponding week of previous year ...	140.91	60.46	741.58	105.08	24.36	190.10	.....	.....	.....
Total to corresponding date of previous year ...	2,128,585	9,13,236	1,01,44,542	14,38,758	3,00,010	26,52,004	287,141	414,022	701,163

(a) Includes audited figures up to week ending 14th April 1894.

(b) } Due to bull market.

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Approximate earnings for the week ending 19th May 1894	...	Rs. 16,371	A. 0	P. 0
Corresponding period of 1893	...	16,221	0	0
Increase	...	150	0	0
Receipts per mile for the week ending 19th May 1894	...	321	0	0
Corresponding period of 1893	...	318	1	0
Increase	...	2	15	0
Receipts from 1st January to 19th May 1894	...	2,24,924	0	0
Corresponding period of 1893	...	2,34,572	0	0
Decrease	...	9,648	0	0

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Approximate earnings for the week ending 26th May 1894	...	Rs. 14,575	A. 0	P. 0
Corresponding period of 1893	...	12,917	0	0
Increase	...	1,658	0	0
Receipts per mile for the week ending 26th May 1894	...	285	12	7
Corresponding period of 1893	...	253	4	6
Increase	...	32	8	1
Receipts from 1st January to 26th May 1894	...	2,39,499	0	0
Corresponding period of 1893	...	2,47,489	0	0
Decrease	...	7,990	0	0





# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, JUNE 13, 1894.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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### RESOLUTION ON THE ADMINISTRATION REPORT OF THE JAIL DEPARTMENT FOR THE YEAR 1893.

JAILS—No. 493P.D.

*Dated Darjeeling, the 7th June 1894.*

#### RESOLUTION.

READ—

The Report on the Administration of the Jail Department for the year 1893.

Read also—

The Reports for the years 1891-92, and the orders of Government recorded thereon.

Surgeon-Major D. W. D. Comins was in charge of the Department until the 6th September, on which date he proceeded on three months' privilege leave. During his absence Mr. A. D. Larmore, Superintendent of the Alipore Jail and Deputy Inspector-General of Jails, officiated for him until the 6th December, when Dr. Comins resumed charge.

2. *Judicial Statistics.*—The only changes made in the classes of jails during the year were the conversion of the subsidiary jail at Barasat into an intermediate jail, and the raising of the intermediate jail at Bankura to the status of a first class district jail. With these exceptions the number of central, district, intermediate and subsidiary jails remained unchanged. The following table

shows the number of prisoners of all classes confined in the jails and subsidiary jails of the province during the year, and compares the figures with those of the preceding ten years:—

	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.
1	2	3	4	5	6	7	8	9	10	11	12
Number of prisoners of all classes in jails and subsidiary jails on the last day of previous year ...	15,595	14,718	15,354	15,076	14,629	13,210	13,985	15,048	15,211	16,609	17,794
Total number admitted during the year ...	74,643	80,852	80,853	77,966	75,664	81,136	84,639	80,959	87,925	95,523	91,842
Total ...	90,238	95,570	96,207	93,042	90,233	94,346	98,624	96,067	103,136	112,132	1,09,636
Total discharged ...	75,520	80,216	81,131	78,413	77,683	80,361	83,576	80,800	86,546	94,338	92,106
Balance at the end of the year ...	14,718	15,354	15,076	14,629	13,210	13,985	15,048	15,207	16,590	17,794*	17,530
Daily average of all classes ...	15,026	15,101	15,177	14,806	12,250	13,731	15,026	14,777	15,916	17,180	17,724

\* One civil prisoner, who remained in confinement on the 31st December 1892 at the Khurda subsidiary jail, was by an oversight shown as discharged in the statistics for the year 1892.

The daily average population of all classes of prisoners rose from 17,180 in 1892 to 17,724, but the total number of admissions during the year fell from 95,523 to 91,842, and the balance remaining in jail at the close of the year from 17,794 to 17,530. Twenty out of the 45 central, district, and intermediate jails show an increase in the number of direct admissions, the largest increase (225) being in the Faridpur Jail, which last year showed the greatest decrease in crime in the whole province. Twenty-five jails show a decrease in the number of direct admissions, the decrease being greatest in the jails at Mymensingh (394), Darbhanga (315), Champaran (241), and Calcutta (226).

3. *Releases.*—The total number of releases under the various heads during each of the last eight years is shown in the following table:—

	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.
1	2	3	4	5	6	7	8	9
Released on expiry of sentence ...	27,125	21,328	26,452	28,764	28,464	28,873	32,543	33,046
.. on appeal ...	11,845	1,903	1,880	1,942	2,038	2,120	2,156	1,931
.. under remission rules ...	1,673	1,017	1,352	1,675	1,622	1,661	1,598	1,771
.. on medical grounds ...	23	28	33	37	39	105	140	*44
.. on other grounds ...	27	6,484	88	2	9	9	6	9

\* Excluding 33 moribund prisoners who were released under rule 458 of the Jail Code and included among the number of deaths in Jail.

The 44 prisoners released on medical grounds include those released under Rule 488A of the Jail Code, but not the 33 moribunds who were released under Rule 488 of the Code, and who, under the orders of the Government of India, have been shown this year for the first time among the prisoners who died in jail. The Lieutenant-Governor is glad to observe that the improvement noticed last year in the number of releases on appeal has been maintained (thus showing greater care in the decisions of the Lower Courts), and that the number of such releases is smaller than it has been in any year since 1887.

4. *Numbers transported and executed.*—The number of prisoners transported from the Bengal jails to the Andamans rose from 104 to 120, of whom 13 were females. The number of executions decreased from 32 to 30, and of these 6 and 5 were in the Backergunge and Chittagong Jails respectively.

5. *Classification of convicts.*—Out of 37,265 convicts admitted direct into jail during the year, 21,705 or 58·25 per cent. were Hindus, 13,899 or 37·30 per cent. were Muhammadans, and 421 or 1·13 per cent. were Christians. Of the total number 32,426 or 87·02 per cent. were wholly uneducated, and of the remainder only 1,763 or 4·73 per cent. were able to read and write well. The number of juveniles under 16 years of age admitted to jail rose from 453 to 458. The Inspector-General reports that several juveniles who should have been sent to the Reformatory had to be detained in jail, as the schools at Hazaribagh and Alipore were full throughout the year. Twenty-five additional cubicles are under construction in the Hazaribagh Reformatory School, but there is abundance of room in the school, and more accommodation for boys should be provided

without delay. The number of prisoners previously engaged in agricultural pursuits fell from 22,951 in 1892 to 21,431, and the percentage of such prisoners to other classes from 61·94 to 59·93. The number of female convicts admitted direct to jail was 1,510 compared with 1,484 and 1,265 in 1892 and 1891 respectively.

6. *Re-convictions*.—Although the number of admissions to jail was smaller during the year under review than in the preceding year, the number of re-convictions rose from 3,888 to 3,969, and the ratio per cent. from 10·08 to 10·65. The Inspector-General considers that there is still much room for increased accuracy in registering re-convictions, but the improvement already effected is satisfactory, and with the extension of the anthropometrical system for the identification of habitual offenders, a further improvement may be expected. The system has made rapid strides during the year, and the Inspector-General reports that all possible efforts have been made by the Jail Department to assist the police in working it effectively. Copies of measurements are now recorded on the backs of police-registered slips which accompany warrants, and the system of weekly inspections by the police, of prisoners admitted during the previous week and of those to be released in the following week, was introduced at the close of the year in place of the ordinary walk round at the Sunday parade. The number of persons sent to jail in default of giving security for good behaviour has been steadily increasing for some years, and in 1893 it was 1,761 as compared with 1,448 and 1,507 in 1891 and 1892 respectively.

7. *Sentences*.—The number of sentences of simple imprisonment shows an increase from 2,472 in 1891 and 2,769 in 1892 to 2,965 during the year under review. Most of these are excise cases, and the Lieutenant-Governor has hardly ever found, in his inspections of jails, any instances in which simple imprisonment has been imposed where it would have been more judicious to inflict rigorous imprisonment. The number of prisoners sentenced to rigorous imprisonment has fallen from 35,441 to 33,483. Of the 16,394 convicted prisoners remaining in jail on the last day of 1893, 7,609 or 46·41 per cent. had sentences not exceeding one year, against 8,226 or 49·41 per cent. on the last day of 1892. The number of prisoners with sentences exceeding one year was 4,222 as compared with 4,327 in the preceding year.

8. *Under-trial prisoners*.—The Lieutenant-Governor is glad to observe that the improvement in the detention of under-trial prisoners noticed in the Resolution on last year's report has been maintained during the year under review. The average detention in sessions cases was 39·99 days, and in all other cases 10·98, or practically the same as in the preceding year; whereas the figures for 1890 were 45·88 and 12·28 respectively. The districts which show the best results as regards the detention of under-trial prisoners in other than sessions cases are Gaya (4·91 days), Balasore (6·60), Cuttack (6·97), Darjeeling (7·13), Muzaffarpur (7·34), and Dinajpur (7·92). The districts with the worst results are Jessore (21·54 days), Purulia (19·97), Bogra (16·22), Faridpur (15·48), and Dacca (15·19). The number of deaths among under-trial prisoners in 1893 was 32, and the ratio per mille of such deaths to the total daily average population was 25·7. In this respect the year compares very favourably with 1892, the corresponding figures for which were 69 and 53·5. The three deaths among under-trial prisoners at Arrah, and the two at Khulna, are responsible for the high ratios shown against jails at these places: in the former instance especially the number is regrettably large and bears out what has so often been said as to the unhealthy condition of a large proportion of prisoners when they enter the jail.

9. *Civil prisoners*.—There were 72 prisoners in confinement on the last day of 1892, and the number of admissions during 1893 fell from 873 to 751. Of these 8 were transferred, 1 convicted and 757 released, and 57 remained in confinement at the end of the year.

10. *State prisoners*.—The Lushai State prisoner Nikoalo, who murdered one of his fellow-prisoners in jail in July 1892, but who was subsequently acquitted by the Sessions Court on the ground of insanity, continued to be detained in the Alipore Central Jail, and it is reported that he now gives but little trouble, although he is listless and dull and weaker in body. Two other Lushai Chiefs were detained in the Hazaribagh Jail throughout the year. The



health of these prisoners is good, and they appear to be comfortable and well looked after.

11. *Jail buildings*.—Excluding a sum of Rs. 5,878 expended on the Presidency Jail Press and of Rs. 2,426 for the Reformatory School at Alipore, the total expenditure for 1893 was Rs. 84,310 compared with Rs. 1,56,543 in 1892. Among the principal works of the year were the construction of cowsheds and godowns, and the extension of the workshops in the Alipore Jail, at a cost of Rs. 18,686, the extension and repairs of the Hazaribagh Jail at a cost of Rs. 12,836, the supply of drinking water to the Arrah Jail (Rs. 9,809), and the construction of a new jail at Palamau at a cost of Rs. 6,674. Provision was also made for enlargements and alterations in the Khulna Jail, and for the construction of a subsidiary jail at Narainganj, but it was subsequently decided to drop these proposals and to utilize the money in providing further accommodation in the Buxar and Bhagalpur Jails. Plans and estimates for a new double-storied barrack on an improved form in the Bhagalpur Jail were drawn up and received the sanction of Government on the 26th January 1894, too late to admit of the commencement of the work during the past financial year. The daily average number of convicts employed on jail buildings fell from 997 in 1892 to 951.

12. *Guards*.—Owing to the conversion of the subsidiary jail at Barasat into an intermediate jail, and the raising of the status of the Bankura intermediate jail to that of a first class district jail, the total strength of the permanent warder guard was raised to 1,643 men of all grades, being an increase of one head warder and 22 warders as compared with last year. It is satisfactory to find that the Inspector-General is again able to report favourably on the way in which the warder guards as a body have done their work, notwithstanding the high prices of food, the smallness of their pay, and the ever-increasing amount of work required of them. In spite of the increase in the number of warders, the number of punishments inflicted on them (in which are included warnings and censure) shows a satisfactory falling off from 1,935 in 1892 to 1,879 during the year under review. The only instance of dissatisfaction or inclination to insubordination noted occurred among the warders of the Chapra Jail, and this is attributed to the excited state of feeling in the district in consequence of the anti-kine-killing agitation. Two head-warders of the Barasat Jail were sentenced to seven years' rigorous imprisonment each for taking out prisoners at night for the purpose of stealing. Dr. Comins again bears tribute to the smartness and efficiency of the warder guards at many jails, but he has omitted to mention whether anything has been done to give effect to the suggestion contained in last year's Resolution, that the warders should combine with the regular police in firing and ordinary drill exercise.

13. *Escapes*.—There were 26 escapes of convicts as compared with 34 in 1892, and of this number 1 was from a central jail, 8 from district jails, 8 from intermediate jails, and 9 from subsidiary jails. Twelve prisoners escaped from inside and 14 from outside the jail, the corresponding figures for the previous year being 21 and 13 respectively. Of the 26 convicts who escaped, 20 were recaptured during the year in addition to 5 who had escaped in 1892.

14. *Prison discipline*.—Under the orders of the Government of India, warnings are now registered as punishments, and are included in statement VI annexed to the report. The number of warnings in 1893 was 11,871, and excluding these the number of punishments was 33,205 as against 34,750 in 1892. The number of cases of punishment by solitary confinement remained practically the same, but the Lieutenant-Governor notices with satisfaction that, in spite of the increased jail population, the number of prisoners whipped fell from 335 to 326, and the percentage of whippings to the daily average number of prisoners from 2.2 to 1.9. The number of prisoners punished with fetters also shows a falling off from 11,522 in 1892 to 10,418.

15. *Convict officers and mark remissions*.—The number of prisoners employed as convict officers during the year rose from 2,198 to 2,409, and the number of convict warders from 409 to 425. Notwithstanding this increase, the number of convict officers punished fell from 1,783 to 1,637, and the percentage punished to the average number employed from 20.4 to 17.4. The number of prisoners released during the year, who were on the mark system, was 1,771, and of these only seven failed to gain remission under it.

16. The gross expenditure of the Department for the last ten years is shown in the following table:—

	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.
	1	2	3	4	5	6	7	8	9	10
General supervision	Rs. 47,018	Rs. 48,307	Rs. 49,233	Rs. 49,198	Rs. 50,251	Rs. 49,344	Rs. 49,890	Rs. 48,820	Rs. 51,583	Rs. 58,454
Dieting prisoners ...	3,57,513	3,65,396	3,34,687	2,44,730	2,95,680	3,89,300	3,54,257	3,63,690	4,42,485	4,42,617
Establishment (excluding the police)	4,36,153	4,42,863	4,77,450	4,60,884	4,55,888	4,51,440	4,40,777	4,47,212	4,50,223	4,56,100
Hospital charges ...	39,327	49,383	42,899	39,008	46,934	56,825	47,766	49,155	47,787	52,541
Clothing ...	58,614	69,744	60,051	44,272	58,364	70,098	54,257	55,836	73,784	63,663
Miscellaneous contingencies.	90,361	1,03,216	1,02,139	96,85	1,28,592	1,47,911	1,47,721	1,66,790	1,87,779	1,86,910
Petty construction and repairs ...	21,715	27,777	28,833	27,824	25,842	22,053	29,093	31,606	26,586	19,114
Stationery ...	889	2,342	1,805	1,403	1,228	1,321	1,446	1,215	1,369	1,457
Medical stores ...	5,000	7,545	6,252	6,359	5,880	2,848	2,64	1,245	1,030	298
Total ...	10,56,490	11,16,423	10,93,361	9,68,033	10,68,161	11,91,140	11,27,827	11,65,569	12,82,526	12,81,44
Daily average population of all classes.	15,101	15,176	14,806	12,250	13,731	15,025	14,777	15,915	17,178	17,721
Average expenditure per prisoner	Rs. A. P. 69 15 4	Rs. A. P. 73 9 0	Rs. A. P. 73 13 6	Rs. A. P. 79 0 4	Rs. A. P. 77 12 8	Rs. A. P. 79 4 5	Rs. A. P. 76 6 3	Rs. A. P. 73 3 9	Rs. A. P. 74 10 6	Rs. A. P. 72 5 0
Public Works Department ...	Rs. 1,09,739	Rs. 60,657	Rs. 92,804	Rs. 1,88,353	Rs. 2,40,244	Rs. 2,37,214	Rs. 1,56,810	Rs. 2,03,705	Rs. 1,56,543	Rs. 84,310

The increase in the head "General Supervision" is due to the appointment of Mr. Larymore to act as Inspector-General of Jails during the absence of Dr. Comins on privilege leave, and to the payment to both these officers of exchange compensation allowance. Including all heads of expenditure, except that of Public Works, the average cost per prisoner was Rs. 72.5 as compared with Rs. 74.10.6 in 1892.

17. *Average rates.*—The average prices paid for the chief articles of diet during the year 1893 as compared with those of the five previous years are shown in the following table:—

	1893.	1892.	1891.	1890.	1889.	1888.
	1	2	3	4	5	6
	Per maund.	Per maund.	Per maund.	Per maund.	Per maund.	Per maund.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Rice	2 10 8	2 9 1	2 1 9	2 2 7	2 7 6	1 14 10
Wheat (flour)	3 4 3	3 10 7	3 1 7	2 15 4	3 7 0	3 0 9
Maize	1 12 7	1 13 5	2 0 0	1 12 9	2 1 2	1 10 2
Dal	2 8 10	2 11 9	2 7 8	2 8 4	2 11 0	2 3 2
Meat	6 10 8	6 3 10	6 6 7	6 2 2	6 3 6	6 2 9
Fish	6 5 8	6 7 5	6 4 8	6 11 10	6 7 3	6 0 0
Salt	3 11 5	3 11 0	3 12 6	3 15 2	4 0 1	3 15 0

The average price of rice during the year was higher than in any of the preceding five years, but with this exception the price of food-grains shows a decrease as compared with 1892. The Inspector-General's report on the results of the system of the timely storage of grain at the cheap season of the year is not altogether satisfactory. In some instances excellent arrangements are said to have been made, especially by Mr. Leonard and Jailor Babu Bishto Chunder Chatterjee at the Bhagalpur Jail, Dr. Kelly at Naya Dumka and Dr. R. M. Blaker at Dinajpur. At the Purnea Jail also, by the timely storage of grain, the cost of diet per prisoner has been reduced from Rs. 34-7-2 to Rs. 23-11-7. The Lieutenant-Governor regrets, however, to hear that in some jails the reverse has been the case, and that the storage system has not always been carried out to the best advantage. The rise in the cost of diet in the Backergunge Jail from Rs. 21-2-10 to Rs. 29-8 per prisoner is ascribed in a great measure to bad management on the part of the jailor, Babu Gopal Chunder



Mukerjee, and to his failure to store grain at the proper time. Sir Charles Elliott desires once more to draw attention to the remarks contained in last year's Resolution on this subject. The storage system, if worked judiciously and with the exercise of ordinary care, should prove a useful means of reducing jail expenditure, and His Honour trusts that next year he will be able to receive a more satisfactory report on the results attained.

18. The expenditure per prisoner for diet in each jail compared with the expenditure of the previous year is shown in the following table:—

JAILS.	1893.	1892.	JAILS.	1893.	1892.	JAILS.	1893.	1892.
1	2	3	4	5	6	7	8	9
	Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.
Presidency—European	75 11 7	76 0 4	Murshidabad ...	24 10 4	24 11 8	Pabna ...	21 0 10	21 10 1
Darjeeling ...	37 6 9	40 0 0	Bogra ...	24 6 5	22 14 9	Burdwan ...	20 12 4	23 12 8
Barasat ...	36 15 5	...	Saran ...	24 3 5	26 1 3	Jalpaiguri ...	20 7 8	26 6 0
Midnapore ...	31 5 0	30 9 2	Tippera ...	24 15 6	24 8 4	Puri ...	20 5 3	23 2 8
Mymensingh ...	29 9 9	25 8 3	Purnea ...	23 11 7	34 7 2	Birohum ...	20 4 11	21 0 0
Backergunge ...	29 8 0	21 2 10	Manbhum ...	23 1 11	18 6 8	Naya Dumka ...	19 14 8	25 0 1
Cuttack ...	23 13 2	27 15 2	Cuttack ...	23 0 11	25 6 6	Balasore ...	19 13 10	20 0 3
Dacca ...	23 11 11	26 10 0	Noakhali ...	22 15 10	30 5 8	Buxar ...	19 12 7	20 11 4
Presidency—Native	28 10 9	30 0 8	Champanan ...	22 15 2	23 10 1	Patna ...	19 0 8	18 5 9
Alipore ...	27 12 6	27 15 6	Rangpur ...	22 11 4	23 3 3	Palamau ...	18 4 7	23 9 3
Faizpur ...	26 5 2	23 9 7	Sahabad ...	22 10 0	34 2 1	Lohardaga ...	18 3 6	18 13 7
Jessore ...	26 4 7	24 8 0	Darbhanga ...	21 11 6	21 15 2	Monghyr ...	18 1 4	24 7 7
Hazaribagh ...	26 4 6	24 2 3	Nadia ...	21 9 10	21 6 3	Gaya ...	17 10 5	20 0 6
Dinajpur ...	25 9 5	21 4 11	Rangpur ...	21 8 0	27 14 2	Balga ...	16 12 6	19 9 10
Hoshly ...	24 7 2	25 11 3	Rajshahi ...	21 7 7	23 13 11			
Kulua ...	25 4 4	21 8 11	Muzaffarpur ...	21 6 11	25 4 8			
Singhbhum ...	24 14 6	21 7 11	Bankura ...	21 4 0	20 8 1			
						Total ...	24 12 8	25 10 6

The high rate of expenditure in the Barasat Jail is due to the fact that the jail was only opened late in the year, when the storage season had passed, and that vegetables and condiments had to be purchased from outside. The increase in the cost of food in Mymensingh and other jails of Eastern Bengal is due to the failure of the crops and to the high prices of food prevailing. The average expenditure per prisoner on food purchased for diet throughout the province was Rs. 24-12-8 against Rs. 25-10-6 in 1892.

19. *Supply of vegetables.*—Owing to excessive rain which spoilt many of the early garden crops, vegetables to the value of Rs. 2,447, and condiments to the value of Rs. 2,122, had to be purchased for 18 and 23 jails respectively. The total value of the products obtained from the jail gardens, fish-ponds, and dairies during the year was Rs. 1,12,571, against Rs. 91,441 in 1892. No credit is taken for this in estimating the expenditure in the different jails, but it is really an addition to the cost of rations, which in Statement X appended to the Report is shown as Rs. 4,17,519 for the whole year, so that the actual cost of feeding each prisoner, given in the preceding paragraph, should be raised by about 25 per cent., making the average cost a little over Rs. 30 per head. The value of the products of the jail dairies increased from Rs. 26,312 to Rs. 35,876, and of grain grown in jail lands from Rs. 5,786 to Rs. 6,574. Experiments have been made during the year in selected jails on the outturn of different crops grown in the jail gardens, and the results of the experiments will be reported to the Director of the Department of Land Records and Agriculture according to rules and in a form prescribed by him for the purpose.

20. *Establishment, &c.*—Expenditure under this head rose from Rs. 3,88,293 to Rs. 3,94,399, and this is chiefly due to an increase of Rs. 5,039 under the head warder staff, and of Rs. 1,650 under the head "Jailors, Deputy and Assistant Jailors," consequent in both cases on the raising of the status of the Barasat subsidiary jail, and the conversion of the Bankura intermediate jail into a first class district jail, and in the former case also to the entertainment of five additional warders in the Hazaribagh Jail, owing to the great increase of population. Hospital charges rose from Rs. 47,368 to Rs. 52,157 in consequence of an increase in the cost of medical stores, and the average cost per head of daily average sick increased from Rs. 71-9-11 to Rs. 84-5-2, which was chiefly due to the issue of a more liberal scale of diet to the sick, convalescents, and weakly prisoners. The falling off in clothing charges from Rs. 73,427 to Rs. 63,493 is partly accounted for by the transfer to Imperial charges of the cost of clothing for transportation prisoners.

21. *Controllable expenditure.*—The total average cost per prisoner on account of diet, hospital charges, and clothing together, for all jails (except Midnapore, which has been omitted from the list given in paragraph 60 of



the report,) was Rs. 31-13-11 as compared with Rs. 33-1 in 1892. In 32 jails the cost per prisoner was below this average, and in 15 it was above it. It is interesting to compare these figures with the mortality rates. The average death-rate for convicts in all the jails of the province was 32·9, and of the 32 cheaply managed jails, in 15 the mortality was above the average, and in 17 it was below it. Of the 15 expensively managed jails, in 9 the death-rate was above, and in 6 it was below the average. These figures demonstrate that the assertion that has been made, that a high rate of mortality accompanies cheapness of food in Bengal jails, is without foundation. Gaya heads the list of cheaply managed jails—a result due partly to the good management of Jailor Babu Dolgobind Chowdhary, and partly to the lower price of food-grains, the storage of grain in the cheap season, and the increased value of the products of the jail dairy and garden. Malda, the second jail in order for cheapness, and Pabna, the tenth in order, had no deaths at all during the year.

22. *Employment of prisoners and manufactures.*—The total daily average number of prisoners sentenced to labour on working days was 16,219, being an increase of 606 as compared with last year. The daily average of sick, convalescent and infirm fell from 1,926 in 1892 to 1,873. The number of prisoners employed on unremunerative labour increased from 985 to 1,080, and the average number employed on works of public utility under the Public Works Department, District Boards and Municipalities from 212 to 220. There was a further satisfactory increase in the net cash earnings from Rs. 3,14,021 in 1891 and Rs. 3,23,211 in 1892 to Rs. 3,81,086 during the year under review.

23. *Average earnings in Central Jails.*—The following table compares the average earnings per prisoner sentenced to labour in central jails for the last two years:—

			1893.		1892.	
			Rs.	A.	Rs.	A.
Presidency ...	...	...	121	14	121	4
Buxar ...	...	...	51	6	35	0
Alipore ...	...	...	32	5	31	8
Midnapore ...	...	...	24	2	24	2
Bhagalpur ...	...	...	21	10	24	8
Rajshahi ...	...	...	9	2	Loss.	
Hazaribagh ...	...	...	8	8	8	0
Dacca ...	...	...	6	5	9	7

In the Alipore Jail the profits on manufactures for the year amounted to Rs. 58,051 as compared with Rs. 55,580 in 1892. In the Presidency Jail the profits increased from Rs. 1,50,011 to Rs. 1,56,921, and towards this the printing industry chiefly contributed. In the Buxar Central Jail there was a marked increase in the earnings from Rs. 38,953 to Rs. 58,278, owing partly to the greater activity in the tent department, the number of tents made having risen from 657 to 897. In the Bhagalpur Jail the year's results were less favourable, the profits having fallen from Rs. 30,794 to Rs. 26,611. This is accounted for partly by a falling off in the demand for blankets and woollen clothing by the Police, Jail and Commissariat Departments, and partly in consequence of the closing of the factory for about a month for repairs at the commencement of the year. It is, however, satisfactory to hear that the quality of the articles supplied by the factory has improved. In the Midnapore Jail, although the average earning per prisoner sentenced to labour was the same as in 1892, the profits on manufacturing operations fell from Rs. 22,411 to Rs. 20,816, and this is accounted for by the decrease in the jail population and the unusual sickness which prevailed among the prisoners during the year. The improvement in the Rajshahi Jail in the results of the year's operations is satisfactory, and the loss of Rs. 3,562 on manufactures in 1892 has been converted into a profit of Rs. 7,026, of which the castor oil industry is credited with Rs. 3,478. In the Dacca Jail mustard-oil pressing and the weaving of prison clothing are the chief industries, but in consequence of a smaller outturn under the latter head, the profits of the year show a falling off from Rs. 10,418 to Rs. 7,154. In District Jails there has been a further improvement in profits on manufacturing operations, the amount of such profits having increased from Rs. 61,174 in 1891 and Rs. 68,263 in 1892 to Rs. 72,690 during the year under review.

24. *Quinine and its distribution*—This industry was transferred from the Hazaribagh Reformatory School to the Alipore Central Jail in December 1892, and by the end of January 1893, all the post-offices in the Bengal, Bihar and Eastern Bengal Circles were supplied with a stock of quinine as a permanent advance. The quantity of quinine distributed was 1,677 $\frac{1}{4}$  lbs., and the cash receipts were Rs. 18,078. The value of the filled five-grain packets in stock at post-offices, &c., at the close of 1893 was Rs. 11,401-0-9, and taking this into consideration, the profits on the year's operations amount to Rs. 3,753-4-4. The Inspector-General remarks that this is an improvement on the original estimates, which allowed little or no margin of profit, and he ascribes the improvement mainly to the use of a lighter and cheaper paper instead of the heavy and expensive paper first selected. It must, however, be remembered that this profit is an estimated one only, based on the assumption that Rs. 11,401, the value of the packets in stock, will be realised, and it makes no allowance on account of possible losses from damp or other causes. It is not the object of Government to make a profit out of this industry, and if it continues to be worked at a profit a more durable paper will be supplied. It is impossible to reduce the price below one pice per packet, or to increase the dose above five grains, but it might be possible to allow some larger commission or reduction in price to purchasers of large quantities. The total number of five-grain packets sold by post-offices in all districts up to the end of 1893 was 1,266,220, and the Lieutenant-Governor considers that the results of the year's operations are very satisfactory, and that the increased facilities for obtaining a supply of quinine at nominal prices will be hailed as a boon by the inhabitants of the rural districts of the Province.

25. *Subsidiary Jails*.—In consequence of the raising of the status of the Barasat subsidiary jail, the number of such jails was reduced from 86 to 85, and of these 16 were visited by the Sub-divisional Officers, who are *ex-officio* Superintendents, less than 70 times, the minimum number required being at the rate of twice a week as long as they are at head-quarters. In 1892, in nine subsidiary jails, only the number of visits paid by the Superintendents fell below the required standard. The Lieutenant-Governor regrets to notice this falling off, and he desires to draw the attention of District Magistrates to the matter, and to the necessity of seeing that this important duty of inspection is not neglected. The number of convicts admitted into the subsidiary jails during the year fell from 17,385 to 16,843, but the daily average number confined rose from 362.52 to 377.39. The average detention of convicts was 7.74 days against 7.26 in 1892. In the Angul and Khondmals subsidiary jails, the average detention was 41.31 and 37.88 days respectively, and in the Alipore (Jalpaiguri) Jail it was 16.30 days, the rules regarding the transfer of prisoners having been relaxed in these jails, in accordance with the orders of Government, to enable the Superintendents to employ the prisoners in extra-mural labour. The Lieutenant-Governor is of opinion that a similar relaxation of the rules might with advantage be made in other subsidiary jails also, and that it would be useful as a means of relieving over-pressure in many district jails. The average detention of under-trial prisoners for 1893 was 11.46 days against 11.30 days in 1892 and 13.55 days in 1891. In seven jails the average detention was over 15 days. Under the orders contained in the circular of 5th August 1891, Magistrates should receive a fortnightly return of under-trial prisoners detained in subsidiary jails for over 14 days, and they should not fail to make immediate enquiry whether the detention was unavoidable or not.

The total expenditure on subsidiary jails rose from Rs. 1,08,994 in 1892 to Rs. 1,10,027. The increase of Rs. 525 under the head "Rations" is attributable to the high prices of food grains, and that of Rs. 2,404 under the head "Contingencies" to the additional expenditure on account of transfer charges, and of travelling allowance of warders, as well as to the issue of hurricane lanterns to replace those unserviceable through long use. The total credits from manufactures amounted to Rs. 25,743 as compared with Rs. 24,129 in 1892, and the net profits for the year rose from Rs. 3,734 to Rs. 4,183. The total amount expended on subsidiary jail buildings was only Rs. 10,118 against Rs. 54,692 in 1892.

26. *Accommodation in Jails*.—The daily average strength of the convict population of the central, district and intermediate jails of the Province was



16,050, of whom 15,650 were males, the corresponding figures for 1892 being 15,471 and 15,111 respectively. It will thus be seen that the daily average strength of convicts, both male and female, has increased, and the Inspector-General reports that the increase has strained the resources of jail accommodation to the utmost. The unhealthy jails at Rangpur, Dinajpur and Purnea remained depleted throughout the year, and prisoners were also transferred from other unhealthy to healthier jails for the benefit of their health. Partly for this reason, and partly owing to the narrow margin between the average jail population of Bengal and the maximum capacity of the jails, it was not always possible to keep the population of the jails within their sanctioned capacity. The central jails have been full throughout the year, and in spite of transfers of prisoners, wherever possible, to jails, however distant, in which there was any available room, and after deducting the daily average number of sick prisoners (641.97) for whom accommodation is provided in hospitals, it was found that in 14 jails the daily average number of convicts exceeded the ordinary sanctioned sleeping accommodation. In order to relieve the overcrowding of the sleeping wards in these jails, the excess prisoners were allowed to sleep in the workshops and out-houses, or, where the accommodation permitted, in the hospital wards. The daily average strength of under-trial prisoners in all jails, excluding subsidiary jails, was 789 as compared with 813 in 1892; but in spite of this decrease, in 10 jails the capacity of the under-trial wards was exceeded. The convict population on the first day of 1894 was 15,978 as compared with 16,151 on the first day of 1893, and the Lieutenant-Governor hopes that we have now entered on a descending scale. The necessity of providing additional accommodation in the jails of Bengal is fully recognized by Government, and much has already been done, and is still being done, to meet this difficulty and to correct errors of site and plan on which many of the Bengal jails were originally constructed. The capacity of the Hazaribagh Jail for convicts has recently been increased from 547 to 917, and a proposal to provide further accommodation in the Bhagalpur Central Jail by the construction of new sleeping wards has received the sanction of Government.

27. *Water-supply.*—Dr. Comins' remarks on this important part of jail administration are meagre, and the Lieutenant-Governor would have liked fuller information as to what has been done during the year. Under the orders of Government a qualitative analysis of the water supplied in every jail should be made every year on certain specified months of each year, and if the supply is changed or the health of the prisoners deteriorates, or if the supply is not under the control of the authorities, a quantitative analysis should also be made. The Inspector-General was requested to carefully note and compare the results of these analyses in his Annual Administration Reports on the working of the department, but in his present report he has made no remarks on this point. At his recent inspection of the Cuttack Jail, the Lieutenant-Governor found that the order requiring the water to be analysed every year had not been observed, and he fears that this may have been the case in other jails also. Sir Charles Elliott is, however, glad to receive the assurance of the Inspector-General that careful attention has been paid to the question of the purity of the water-supply during the year. Among other useful reforms, pumps and pipes have been supplied, improved methods to prevent pollution or contamination before use have been adopted, and 24 jails have been provided with the excellent new boiler for drinking-water invented by Mr. A. D. Larymore of the Alipore Jail, which secures the water being really boiled, not merely heated.

28. *Clothing, &c.*—The supply of clothing has been much the same as in former years, but medical officers have been allowed to use their own discretion for the supply of extra clothing in cases which they consider require it. This discretion should be freely exercised, especially in the case of old and sickly prisoners and in unhealthy jails. The Inspector-General reports that, as recommended by the Jail Committee of 1889, the system of issuing jail clothing as required, instead of on a particular date, is being introduced.

The system of granting gratuities to Civil Hospital Assistants for specially deserving work has been continued, and is said to have had a sensible effect in encouraging efforts to keep prisoners in good health. The Lieutenant-Governor observes, however, that in paragraph 55 of the Report it is stated that the decrease in the cost of establishment under the head "Civil Hospital Assistants



and Compounders" is due to the difference in the amount of rewards granted in 1892 and 1893. Sir Charles Elliott considers that more might have been said on this subject, and he desires that in future reports the number of Civil Hospital Assistants rewarded, and the amount of the rewards disbursed, may be specified. It has been ascertained that in 1893 Rs. 4,006 were thus disbursed.

29. *Mortality among prisoners.*—The following table, reprinted from paragraph 93 of the Report, shows the mortality among prisoners for each year, as well as for each decade, from 1844 to 1893:—

YEARS.	Daily average number of prisoners.	Daily average sick.	Ratio per mille of daily sick.	NUMBER OF DEATHS—			DEATH-RATES PER MILLE OF AVERAGE STRENGTH—			REMARKS.
				From cholera.	From all other causes.	Total number of deaths.	From cholera.	From all other causes.	From all causes.	
1	2	3	4	5	6	7	8	9	10	11
1844 ... ..	22,785	No figures available.		338	1,038	1,376	14.8	45.5	60.3	
1845 ... ..	23,488			511	1,120	1,631	22.7	49.8	72.5	
1846 ... ..	21,656			219	1,311	1,530	10.1	60.5	70.6	
1847 ... ..	21,251			217	1,210	1,426	10.2	57.3	67.5	
1848 ... ..	20,121			187	1,026	1,213	9.3	50.9	60.2	
1849 ... ..	20,515			272	918	1,190	13.3	44.7	58.0	
1850 ... ..	18,673			161	787	948	8.5	42.1	50.6	
1851 ... ..	18,540			225	763	986	12.0	41.1	53.1	
1852 ... ..	18,285			482	1,074	1,556	26.3	58.7	85.0	
1853 ... ..	18,104			426	1,334	1,760	23.5	73.7	97.2	
Total ...	202,418	.....	.....	3,036	10,590	13,626	15.0	52.3	67.3	
1854 ... ..	17,670	No figures available.		179	943	1,122	10.1	53.3	63.4	
1855 ... ..	17,835			344	1,267	1,611	19.3	71.0	90.3	
1856 ... ..	16,817			320	1,331	1,651	19.0	79.1	98.1	
1857 ... ..	16,617			364	1,674	2,038	21.9	100.7	122.6	
1858 ... ..	18,728			322	1,979	2,301	17.1	105.7	122.8	
1859 ... ..	17,773			309	1,551	1,860	17.4	87.2	104.6	
1860 ... ..	16,406			633	1,523	2,156	38.4	92.5	130.9	
1861 ... ..	15,523			231	1,163	1,394	14.9	74.9	89.8	
1862 ... ..	16,476			106	1,047	1,153	6.4	63.5	69.9	
1863 ... ..	16,463			338	1,223	1,561	20.5	74.3	94.8	
Total ...	170,358	4,609	56.4	3,146	13,761	16,847	18.4	80.4	98.8	
1864 ... ..	16,729	814	48.6	231	804	1,035	13.8	48.0	61.8	
1865 ... ..	17,439	756	43.3	102	790	892	9.2	45.3	54.5	
1866 ... ..	20,683	746	54.5	684	1,539	2,223	33.0	74.0	107.0	
1867 ... ..	18,733	668	35.6	102	916	1,018	9.0	49.0	58.0	
1868 ... ..	18,061	646	37.7	122	802	924	7.0	44.0	51.0	
1869 ... ..	18,004	676	36.9	176	767	943	9.3	40.7	50.0	
1870 ... ..	18,633	634	34.2	174	657	831	9.4	35.4	44.8	
1871 ... ..	17,803	637	35.7	38	668	706	2.1	37.5	39.6	
1872 ... ..	19,232	675	35.0	128	880	1,008	6.6	45.7	52.3	
1873 ... ..	20,298	690	33.9	140	824	964	6.9	40.5	47.4	
Total ...	186,335	6,942	37.2	2,017	8,647	10,664	10.8	46.4	57.2	
1874 ... ..	21,701	784	36.1	145	1,030	1,175	6.7	47.4	54.1	
1875 ... ..	21,381	836	39.1	96	951	1,047	4.5	44.4	48.9	
1876 ... ..	21,818	852	39.0	271	973	1,244	12.4	44.6	57.0	
1877 ... ..	18,853	731	38.7	151	764	915	8.0	40.5	48.5	
1878 ... ..	18,811	803	42.7	216	1,076	1,292	11.4	57.2	68.6	
1879 ... ..	18,691	947	50.6	343	1,417	1,760	18.3	75.8	94.1	
1880 ... ..	18,061	941	52.2	31	1,103	1,134	1.7	61.2	62.9	
1881 ... ..	16,747	874	52.1	85	1,015	1,100	5.0	60.6	65.6	
1882 ... ..	16,155	850	52.6	132	833	1,065	9.4	57.7	67.1	
1883 ... ..	15,026	730	48.5	62	701	763	4.1	46.6	50.7	
Total ...	187,184	8,350	44.6	1,552	9,963	11,515	8.3	53.2	61.5	
1884 ... ..	15,101	726	48.0	63	682	744	4.1	45.1	49.2	
1885 ... ..	15,177	774	50.9	157	730	887	10.3	48.1	58.4	
1886 ... ..	14,806	649	43.8	41	507	548	2.8	34.2	37.0	
1887 ... ..	12,250	540	44.0	21	380	401	1.7	31.0	32.7	
1888 ... ..	13,731	631	45.9	132	482	614	9.6	35.1	44.7	
1889 ... ..	15,026	695	46.2	132	556	688	8.7	37.0	45.7	
1890 ... ..	14,777	580	39.2	33	444	477	2.2	30.0	32.2	
1891 ... ..	15,915	610	38.3	54	439	493	3.4	27.5	30.9	
1892 ... ..	17,178	687	39.9	68	684	752	3.9	39.8	43.7	
1893 ... ..	17,721	642	36.2	21	552	573	1.2	31.1	32.3	
Total ...	151,682	6,534	43.0	721	5,456	6,177	4.7	36.0	40.7	
Total for last five years ...	80,617	3,214	39.8	308	2,675	2,983	3.8	33.2	37.0	
GRAND TOTAL	897,977	26,405	43.5	10,472	48,357	58,829	.....	.....	.....	
Average ...	17,959	757	43.5	200	967	1,176	11.7	53.8	65.5	

From the above figures it will be seen that the death-rate has fallen from 67.3 and 98.8 per mille, the average of the first and second decades respectively, to 40.7 per mille, the average for the decade ending with the year 1893. Taking the average for the last five years, the decrease is still more marked, the death-rate being 37 per mille, while in 1893 it fell as low as 32.3 per mille.

The figures for 1893 include the 33 moribunds released under rule 488 of the Jail Code, and if out of these we exclude 10 who were alive at the beginning of 1894, the average death-rate for the year will be 31·7, which can claim to be the lowest on record. No doubt, as the Inspector-General remarks, it is sometimes fallacious to include among deaths persons released on medical grounds, and he quotes an instance of a prisoner who was released from the Hooghly Jail in 1892 in order that he might die quietly and peacefully among his friends at home, but who reappeared in jail in 1893 with a sentence of seven years' imprisonment for house-breaking—a result by no means creditable to the Medical Officer's diagnosis of the case. The average death-rate for the year per mille from cholera was only 1·1, also the lowest on record, and this the Inspector-General attributes to the improvement effected of recent years in the water-supply for the jails.

The daily average of sick among convicted and under-trial prisoners decreased from 687 to 642, and the proportional number of admissions to hospital from 1,120·9 to 1,046·1. The jails which showed the largest proportion in the number of admissions to hospital were Barasat (4,569·6) and Malda (4,354·3), but these are small intermediate jails, and the average population confined in them was only 58·21 and 53·05 respectively. The high proportion of sick prisoners confined in the Barasat Jail is due to the fact that the population was largely recruited from the unhealthy districts of Khulna and Jessore. No death among convicts occurred in the Malda Jail during the year, nor in the Pabna and Presidency (European) Jails.

30. *Principal diseases causing sickness and death.*—The following table shows the principal diseases from which prisoners suffered during the year:—

DISEASES.	Number of admissions into hospital.	Number of deaths.	Ratio per mille of deaths to admissions.
Intermittent fever ... ..	5,634	6	1·0
Dysentery and diarrhoea ... ..	4,471	208	46·5
Remittent and continued fevers ... ..	861	19	22·0
Other fevers ... ..	21	11	523·8
Respiratory diseases ... ..	852	89	104·4
Anæmia and general debility ... ..	363	22	60·6
Ulcers and boils ... ..	314	...	...
Serofula and phthisis pulmonalis ... ..	127	58	456·6
Cholera ... ..	54	20	370·3
Small-pox ... ..	5	...	...

The number of deaths from dysentery and diarrhoea has risen from 177 in 1892 to 208 in 1893, and the ratio per mille from 11·1 to 12·6, and it will be seen that these diseases are responsible for the greater number of deaths in the Bengal jails. The jails which show the highest death-rate per mille to average strength from these causes are Bankura (52·9), Burdwan (36·4), Noakhali (36·3), Singhbhum (36·1), Mymensingh (29·5), and Midnapore (26·0). In the Midnapore Jail, the death-rate has always been excessive, and out of 501 deaths which have occurred during the past 12 years, no less than 254 are due to dysentery. Since the close of the year, the Inspector-General has paid a special visit of inspection to Midnapore, and has submitted a careful report on the causes of the high mortality and the measures which in his opinion should be adopted to improve the sanitary condition of the jail. In the Dacca Jail, the death-rate for which for the first time fell below the recorded death-rate of the district, 15 out of the 31 deaths that occurred during the year were due to dysentery. The Lieutenant-Governor notices with approval the many useful measures taken by Dr. Cobb, the late Superintendent of this jail, to prevent the spread of this disease, and he presumes that although no special mention is made of the necessity of good food and clothing, great attention would be paid to these when once the disease has been diagnosed. The remark of Dr. Gordon Price of Burdwan, that admissions for dysentery are chiefly among prisoners who have previously suffered from malarial fevers, dysentery, and diarrhoea in their own homes, and in whom any slight seasonal changes is often sufficient to cause a relapse, is worthy of notice. Dr. Buchanan of the Midnapore Central Jail, in an interesting note which has been forwarded to Government, has shown the connection between tubercle of the lungs and dysentery, and he has drawn attention to



and Compounders" is due to the difference in the amount of rewards granted in 1892 and 1893. Sir Charles Elliott considers that more might have been said on this subject, and he desires that in future reports the number of Civil Hospital Assistants rewarded, and the amount of the rewards disbursed, may be specified. It has been ascertained that in 1893 Rs. 4,006 were thus disbursed.

29. *Mortality among prisoners.*—The following table, reprinted from paragraph 93 of the Report, shows the mortality among prisoners for each year, as well as for each decade, from 1844 to 1893:—

YEARS.	Daily average number of prisoners.	Daily average sick.	Ratio per mille of daily sick.	NUMBER OF DEATHS—			DEATH-RATES PER MILLE OF AVERAGE STRENGTH—			REMARKS.
				From cholera.	From all other causes.	Total number of deaths.	From cholera.	From all other causes.	From all causes.	
1	2	3	4	5	6	7	8	9	10	11
1844 ...	22,785	No figures available.		338	1,038	1,376	14.8	45.5	60.3	
1845 ...	22,488			511	1,120	1,631	22.7	49.8	72.5	
1846 ...	21,656			219	1,311	1,530	10.1	60.5	70.6	
1847 ...	21,251			217	1,219	1,436	10.2	57.3	67.5	
1848 ...	20,121			187	1,026	1,213	9.3	50.9	60.2	
1849 ...	20,515			272	918	1,190	13.3	44.7	58.0	
1850 ...	18,673			161	787	948	8.5	42.1	50.6	
1851 ...	18,540			223	763	986	12.0	41.1	53.1	
1852 ...	18,265			432	1,074	1,506	26.3	58.7	85.0	
1853 ...	18,104			426	1,334	1,760	23.5	73.7	97.2	
Total ...	202,418	.....	.....	3,036	10,590	13,626	15.0	52.3	67.3	
1854 ...	17,670	No figures available.		179	943	1,122	10.1	53.3	63.4	
1855 ...	17,835			344	1,267	1,611	19.3	71.0	90.3	
1856 ...	16,817			320	1,351	1,671	19.0	79.1	98.1	
1857 ...	16,617			364	1,674	2,038	21.9	100.7	122.6	
1858 ...	18,728			322	1,970	2,301	17.1	105.7	122.8	
1859 ...	17,773	833	46.8	309	1,551	1,860	17.4	87.2	104.6	
1860 ...	16,466	9.5	59.2	633	1,523	2,156	38.4	92.5	130.9	
1861 ...	15,523	834	53.7	231	1,163	1,394	14.9	74.9	89.8	
1862 ...	16,476	1,180	71.6	106	1,047	1,153	6.4	63.5	69.9	
1863 ...	16,453	847	51.4	338	1,223	1,561	20.6	74.3	94.8	
Total ...	170,358	4,609	56.4	3,146	13,761	16,847	18.4	80.4	98.8	
1864 ...	16,729	814	48.6	231	804	1,035	13.8	48.0	61.8	
1865 ...	17,439	756	43.3	162	799	962	9.2	45.3	54.5	
1866 ...	20,683	746	54.5	684	1,539	2,223	33.0	74.0	107.0	
1867 ...	18,733	668	35.6	162	916	1,078	9.0	49.0	58.0	
1868 ...	18,061	646	37.7	122	802	924	7.0	44.0	51.0	
1869 ...	18,804	676	35.9	176	767	943	9.3	40.7	50.0	
1870 ...	18,533	634	34.2	174	657	831	9.4	35.4	44.8	
1871 ...	17,803	637	35.7	38	668	706	2.1	37.5	39.6	
1872 ...	19,252	675	35.0	128	880	1,008	6.6	45.7	52.3	
1873 ...	20,298	690	33.9	140	824	964	6.9	40.5	47.4	
Total ...	186,335	6,942	37.2	2,017	8,647	10,664	10.8	46.4	57.2	
1874 ...	21,701	784	36.1	145	1,030	1,175	6.7	47.4	54.1	
1875 ...	21,881	836	39.1	96	951	1,047	4.5	44.4	48.9	
1876 ...	21,818	823	39.0	271	973	1,244	12.4	44.6	57.0	
1877 ...	18,853	781	38.7	151	764	915	8.0	40.5	48.5	
1878 ...	18,811	805	42.7	216	1,076	1,292	11.4	57.2	68.6	
1879 ...	18,691	947	50.6	343	1,417	1,760	18.3	75.8	94.1	
1880 ...	18,061	941	52.2	31	1,103	1,134	1.7	61.2	62.9	
1881 ...	16,747	874	52.1	85	1,015	1,100	5.0	60.6	65.6	
1882 ...	16,155	850	52.6	152	933	1,085	9.4	57.7	67.1	
1883 ...	16,026	730	48.5	62	701	763	4.1	46.6	50.7	
Total ...	187,184	8,350	44.6	1,552	9,963	11,515	8.3	53.2	61.5	
1884 ...	15,101	726	48.0	62	682	744	4.1	45.1	49.2	
1885 ...	15,177	774	50.9	157	730	887	10.3	48.1	58.4	
1886 ...	14,806	649	43.8	41	507	548	2.8	34.2	37.0	
1887 ...	12,250	540	44.0	21	380	401	1.7	31.0	32.7	
1888 ...	13,731	631	45.9	132	482	614	9.6	35.1	44.7	
1889 ...	15,026	605	46.2	132	556	688	8.7	37.0	45.7	
1890 ...	14,777	580	39.2	33	444	477	2.2	30.0	32.2	
1891 ...	15,915	610	38.3	54	439	493	3.4	27.5	30.9	
1892 ...	17,178	687	39.9	68	684	752	3.9	39.8	43.7	
1893 ...	17,721	642	36.2	21	552	573	1.2	31.1	32.3	
Total ...	151,682	6,534	43.0	721	5,456	6,177	4.7	36.0	40.7	
Total for last five years ...	80,617	3,214	39.8	308	2,675	2,983	3.8	33.2	37.0	
GRAND TOTAL	897,977	26,405	43.5	10,472	48,557	58,929	.....	.....	.....	
Average ...	17,959	767	43.5	209	967	1,176	11.7	53.8	65.5	

From the above figures it will be seen that the death-rate has fallen from 67.3 and 98.8 per mille, the average of the first and second decades respectively, to 40.7 per mille, the average for the decade ending with the year 1893. Taking the average for the last five years, the decrease is still more marked, the death-rate being 37 per mille, while in 1893 it fell as low as 32.3 per mille.



The figures for 1893 include the 33 moribunds released under rule 488 of the Jail Code, and if out of these we exclude 10 who were alive at the beginning of 1894, the average death-rate for the year will be 31·7, which can claim to be the lowest on record. No doubt, as the Inspector-General remarks, it is sometimes fallacious to include among deaths persons released on medical grounds, and he quotes an instance of a prisoner who was released from the Hooghly Jail in 1892 in order that he might die quietly and peacefully among his friends at home, but who reappeared in jail in 1893 with a sentence of seven years' imprisonment for house-breaking—a result by no means creditable to the Medical Officer's diagnosis of the case. The average death-rate for the year per mille from cholera was only 1·1, also the lowest on record, and this the Inspector-General attributes to the improvement effected of recent years in the water-supply for the jails.

The daily average of sick among convicted and under-trial prisoners decreased from 687 to 642, and the proportional number of admissions to hospital from 1,120·9 to 1,046·1. The jails which showed the largest proportion in the number of admissions to hospital were Barasat (4,569·6) and Malda (4,354·3), but these are small intermediate jails, and the average population confined in them was only 58·21 and 53·05 respectively. The high proportion of sick prisoners confined in the Barasat Jail is due to the fact that the population was largely recruited from the unhealthy districts of Khulna and Jessore. No death among convicts occurred in the Malda Jail during the year, nor in the Pabna and Presidency (European) Jails.

30. *Principal diseases causing sickness and death.*—The following table shows the principal diseases from which prisoners suffered during the year:—

DISEASES.	Number of admissions into hospital.	Number of deaths.	Ratio per mille of deaths to admissions.
Intermittent fever	5,634	6	1·0
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Anæmia and general debility	363	22	60·6
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Scrofula and phthisis pulmonalis	127	58	456·6
Cholera	54	20	370·3
Small-pox	5	...	...

The number of deaths from dysentery and diarrhoea has risen from 177 in 1892 to 208 in 1893, and the ratio per mille from 11·1 to 12·6, and it will be seen that these diseases are responsible for the greater number of deaths in the Bengal jails. The jails which show the highest death-rate per mille to average strength from these causes are Bankura (52·9), Burdwan (36·4), Noakhali (36·3), Singhbhum (36·1), Mymensingh (29·5), and Midnapore (26·0). In the Midnapore Jail, the death-rate has always been excessive, and out of 501 deaths which have occurred during the past 12 years, no less than 254 are due to dysentery. Since the close of the year, the Inspector-General has paid a special visit of inspection to Midnapore, and has submitted a careful report on the causes of the high mortality and the measures which in his opinion should be adopted to improve the sanitary condition of the jail. In the Dacca Jail, the death-rate for which for the first time fell below the recorded death-rate of the district, 15 out of the 31 deaths that occurred during the year were due to dysentery. The Lieutenant-Governor notices with approval the many useful measures taken by Dr. Cobb, the late Superintendent of this jail, to prevent the spread of this disease, and he presumes that although no special mention is made of the necessity of good food and clothing, great attention would be paid to these when once the disease has been diagnosed. The remark of Dr. Gordon Price of Burdwan, that admissions for dysentery are chiefly among prisoners who have previously suffered from malarial fevers, dysentery, and diarrhoea in their own homes, and in whom any slight seasonal changes is often sufficient to cause a relapse, is worthy of notice. Dr. Buchanan of the Midnapore Central Jail, in an interesting note which has been forwarded to Government, has shown the connection between tubercle of the lungs and dysentery, and he has drawn attention to

the frequency of the termination in tubercular phthisis of cases of chronic dysentery, and to the remarkable fact that no special symptoms occur to draw attention to it. This view is confirmed by the observations of Dr. Nott when he was in charge of the Birbhum Jail; and the close connection between these diseases and malarial cachexia helps to explain to some extent the fact that so few deaths from dysentery or phthisis and so many from malarial fever are returned as such in the district registration returns. The number of deaths from respiratory diseases decreased from 100 to 89, and from cholera from 115 cases with 60 deaths in 1892 to 54 cases with 20 deaths in 1893. There were only five cases of small-pox during the year, none of which were fatal, against 45 cases with 14 deaths in 1892. Under revised rule 447 of the Jail Code, all convicted prisoners, whether protected or not, are now required to be vaccinated on the first convenient opportunity after their arrival in jail, and re-vaccination has been ordered whenever it appears to be necessary. The Lieutenant-Governor desires that the effect which has been given to these orders should be specially mentioned in future reports.

31. The following table shows the jails in which the highest mortality occurred, omitting those in which the number of deaths was below 5:—

	No. of deaths.	Death-rates from all causes per mille.		Death-rates exclusive of cholera per mille.	
	1893.	1893.	1892.	1893.	1892.
1	2	3	4	5	6
Puri ...	10	111.7	61.5	89.4	41.0
Jessore ...	26	86.2	80.2	86.2	80.2
Bankura ...	23	76.0	53.6	76.0	53.6
Midnapore ...	61	69.1	54.0	66.9	47.7
Mymensingh ...	21	56.3	56.9	56.3	56.9
Burdwan ...	10	52.0	27.1	52.0	27.1
Muzaffarpur ...	14	49.5	44.8	49.5	28.5
Darbhanga ...	13	46.0	45.8	42.5	42.6
Backergunge ...	17	45.0	26.3	45.0	26.3
Rangpur ...	5	41.3	109.0	43.3	109.0
Purnea ...	5	42.5	62.4	42.5	62.4
Gaya ...	18	40.8	23.5	40.8	23.5
Hazaribagh ...	25	40.3	36.8	40.3	36.8
Patna ...	12	39.0	31.1	22.8	20.7
Hooghly ...	13	37.5	47.4	37.5	47.4
Shahabad ...	8	36.8	43.3	36.8	43.3

NOTE.—Including moribund prisoners who were released under rule 448 of the Jail Code during the year 1893.

Under the orders of Government, dated the 16th October 1893, a Committee consisting of the Inspector-General of Jails, the Commissioner of the Division and the Sanitary Commissioner, Bengal, was appointed to enquire into the sanitary condition of the jails at Puri, Jessore, and Mymensingh, as well as of those at Purnea, Dinajpur, Jalpaiguri, Malda, Rangpur, Shahabad, and Saran, in which the death-rate for 1892 was excessive. The Committee concluded their enquiries after the close of the year, but the result has not as yet been formally communicated to Government. Nevertheless the Lieutenant-Governor considers that the Inspector-General should have briefly stated in the present report what the Committee discovered at these jails, and especially at Puri, in which the death-rate for the year is so much higher than in 1892. The high death-rate in the Bankura, Darbhanga, Gaya and Hazaribagh Jails is due chiefly to the transfer from the damp, unhealthy districts of Eastern Bengal of prisoners suffering from malarious diseases.

Of the 527 convicts who died in jail during the year, 155 were received into jail in good health, 192 were found to be in indifferent health, and 180 in bad health. The Inspector-General reports that some jails were particularly unfortunate in this respect. Thus, of the 61 convicts who died in the Midnapore Jail, only 5 were admitted in good health. In the Bankura Jail, out of 24 deaths, only 2 were those of prisoners who were received in good health. Of the 19 convicts who died in the Rajshahi Jail, only 3 were received in good health. In Puri, which heads the list of jails with a high rate of mortality, only one was admitted in good health. In this connection there is another point which, in the Lieutenant-Governor's opinion, is worthy of notice, and that is, how many of the deaths occurred immediately after the prisoners' admission into the jail. At his inspection of the jail at Balasore,



which has a high death-rate, His Honour noticed that of the four deaths that occurred during the year, one was from cholera caught on the road, one was from ague which proved fatal within 24 hours of the prisoner's admission, while one was the result of an accident. It would obviously be unfair to charge any of these deaths to the unhealthiness of the jail.

Of the central jails, the healthiest is the Presidency (Native) Jail, the mortality in which has been reduced to the record figure of 11·8 per mille, a result which is in no small measure due to the unremitting efforts of Dr. H. W. Pilgrim to secure the health of the prisoners under his charge.

32. *Inspections.*—Dr. Comins was absent from head-quarters on tour for 108 days during the portion of the year in which he was in charge of the Department, and four central jails, 19 district jails and nine subsidiary jails, as well as the Reformatory Schools at Alipore and Hazaribagh, were inspected by him. Mr. A. D. Larymore, while officiating as Inspector-General of Jails, inspected four central jails, five district jails and one subsidiary jail. The number of visits paid by non-official visitors was 107 as against 104 in 1892, but the number paid by judicial and magisterial officers fell from 269 and 1,967 to 239 and 1,904 respectively. The question of the more extensive appointment of non-official visitors to jails has been under the consideration of Government for some time, and a proposal to increase the number of such visitors has been accepted by His Honour, and the local officers have been asked to submit nominations. The Lieutenant-Governor regrets to observe the omission on the part of the Commissioners of Divisions to visit the jails at Bogra, Gaya, and Shahabad, and of District Judges to visit the jails at Shahabad, Cuttack, Balasore, and Puri. Sir Charles Elliott himself inspected the jail at Chittagong and the subsidiary jails at Cox's Bazar, Barasat, Diamond Harbour, Naogaon, Hajipur, Bettiah and Alipur (Jalpaiguri).

33. *Officers of the Department.*—The Lieutenant Governor is glad to receive the assurance of the Inspector-General that Medical Officers have spared no efforts to minimise the sickness and mortality in their jails, not only by a careful consideration of general arrangements, but also by the care and attention bestowed by them on individual prisoners. Among those who have been specially commended are Dr. U. C. Mukerji at Bankura, Dr. A. H. Nott at Hazaribagh, Dr. H. W. Pilgrim at the Presidency Jail, and Dr. Sunder at Purnea. The Inspector-General also acknowledges the assistance given to him by Mr. J. W. Hanlon, and the good work done by him not only in maintaining the quality of manufactures, but in bringing work from other departments. Sir Charles Elliott also desires to take this opportunity to convey to Mr. A. D. Larymore the thanks of Government for the valuable services rendered by him, and for his ingenious inventions which will no doubt prove of the greatest value to the department. Among these are a boiler which really boils and whistles to announce the fact, a lifter to raise water and to let it flow over the jail, and a cooking range for use in small jails.

34. The thanks of the Lieutenant-Governor are due to Dr. Comins for his interesting report and for his careful administration of the Department under his control.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Inspector-General of Jails for information and guidance.

Ordered also that a copy of this Resolution, and a copy of the Report, be submitted to the Government of India, in the Home Department.

Ordered also that a copy of this Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

*Chief Secretary to the Government of Bengal.*



## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 9th June, 1894.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
<b>BENGAL.</b>			
Burdwan Divn.	1 Burdwan June 9, '94	2.99	Weather—hot and damp. Rain wanted in the Raniganj subdivision. Ploughing is progressing. Sowing of <i>bhadai</i> crops begun in parts. Fodder and water sufficient. Prices of common rice— <div style="float: right; text-align: right;"> Srs.  Burdwan ... 14 to 16  Kalna ... 10 to 14  Katwa ... 14½  Raniganj ... 15  } per rupee. </div>
	Kalna ...	2.21	
	Katwa ...	2.41	
	Raniganj ...	2.08	
	2 Birbhum " 9, '94	3.92	Weather—cloudy and fairly cool. <i>Til</i> doing fairly. Sugarcane planted before the rain has done badly. Land is being ploughed and manured for paddy and sowing has commenced. The rain has done much good. Common rice sells from 14 to 17 seers per rupee in the Sadar subdivision and from 15 to 18 seers per rupee in the Rampur Hât subdivision. Cattle are doing well and get fodder and will now get grazing.
	Rampur Hât ...	2.29	
	3 Bankura " 9, '94	0.75	Weather—decidedly cooler. The rainfall has been beneficial for cultivation which is still very backward in parts of the Sadar subdivision. Prices of coarse rice:— <div style="float: right; text-align: right;"> Srs. c.  Bankura ... 15 0  Vishnupur ... 16 4  } per rupee. </div>
	Vishnupur ...	2.23	
	4 Midnapore " 9, '94	4.87	Weather—cool and seasonable. Agricultural work in full swing. Prospects good. Prices of common rice:— <div style="float: right; text-align: right;"> Srs.  Sadar ... 14  Contai ... 16  Tamluk ... 13  Ghatal ... 14 to 15  } per rupee. </div>
	5 Hooghly " 9, '94	2.12	
	Serampore ...	0.99	
	Jahanabad ...	0.56	
			<div style="float: right; text-align: right;"> Srs.  Sadar ... 12 to 13  Serampore ... 11½ to 13  Jahanabad ... 14 to 15  } per rupee. </div>
	6 Howrah " 9, '94	0.49	Weather—close and cloudy. Prospects of jute and <i>aus</i> sowings favourable, but more rain wanted. Prices normal. Common rice sells at— <div style="float: right; text-align: right;"> Srs.  Howrah ... 10  Ulubaria ... 12 to 13  } per rupee. </div>
	Ulubaria ...	2.06	
	7 24 Parganas " 9, '94	0.90	Weather—seasonable. Prospects of <i>aus</i> and jute up to date fair. The rain in the week has done good to the seedlings. Condition of cattle good. Fodder and water sufficient. Rice sells at— <div style="float: right; text-align: right;"> Srs. c.  Sadar ... 11 to 14 0  Barasat ... 11 14  Basirhat ... 13 10  Diamond Harbour ... 13 4  } per rupee. </div>
	8 Nadia " 9, '94	3.20	
	Kushtia ...	1.20	
	Meherpur ...	2.37	
Presidency Divn.	9 Murshidabad " 9, '94	1.79	Weather—cloudy and fairly cool. Weeding of <i>bhadai</i> going on. Indigo and sugarcane doing well. Common rice selling at 12½ seers per rupee. Supply of fodder and water good.
	Ranaghat ...	1.22	
		1.79	Weather—hot and cloudy. Cultivation of <i>aman</i> paddy, planting of sugarcane and sowing of <i>aus</i> going on. Mulberry, indigo and <i>til</i> doing well. Harvesting of <i>boro</i> paddy going on in Kandi subdivision. No cattle-disease reported. Fodder and water sufficient for cattle. Prices continue normal. Common rice sells at 13 seers per rupee.
	10 Jessore " 9, '94	1.82	
	Jhenida ...	0.72	
	Magura ...	1.16	
	Narail ...	3.41	
	Bangaon ...	1.33	
			<div style="float: right; text-align: right;"> Srs. c.  Sadar ... 13 0  Jhenida ... 12 0  Magura ... 12 0  Narail ... 13 5  Bangaon ... 10 to 13 0  } per rupee. </div>
	11 Khulna " 9, '94	2.63	Weather—cloudy and hot. Cultivation of <i>aus</i> , jute and <i>aman</i> going on. Common rice selling from 11 seers 6 chitaks to 14 seers per rupee. Fodder sufficient. Water wanted in some parts of Satkhira.
	Bagerhat ...	1.41	
	Satkhira ...	0.35	

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concl'd.			
RAJBHARI DIVN.	12 Rajshahi June 9, '94 1.74	0.35	Weather—seasonable. The late rain has done much good to the crops which were said to be greatly in want of moisture. Very much more rain is still however required. Water-supply and fodder ample. There is no cattle-disease. The price of rice varies from 11½ to 14 seers per rupee.
	Nator ...	1.95	
	Naugaon ...		
	13 Dinajpur .. 9, '94 4.20	7.38	Weather—occasionally cloudy. The rain has done much good to the standing crops. No outbreak of cattle-disease. Fodder and drinking water sufficient. Rice selling from 13 to 15 seers per rupee.
	Thakurgaon ...		
	14 Jalpaiguri .. 9, '94 3.33		Weather—hot. Prospects of standing crops good. Common rice sells at 13 seers per rupee at head-quarters. Fodder and water-supply sufficient. No cattle-disease reported.
	15 Darjeeling .. 9, '94 4.46	7.13	Weather—showery throughout the district. Growing cooler in the Terai. In the hills:— <i>Bhutta</i> , potatoes, <i>phaphur</i> , <i>shama</i> , and <i>kangni</i> ripening. <i>Aghani dhan</i> and <i>marua</i> above ground. In the Terai:—Prospects of standing crops good. <i>Aghani</i> being sown in nurseries. Prices of coarse rice:— Srs. Hills ... 7½ to 11 } per rupee. Terai ... 13 to 14 }
	Siliguri ...		
	16 Rangpur .. 9, '94 2.28	3.62	Weather—hot and cloudy with occasional showers. Weeding of <i>aus</i> and <i>jute</i> nearly finished. Rain has been very beneficial. Prospects fair. Price of common rice 10½ to 14 seers per rupee.
	Nilphamari ...	3.59	
	Kurigaon ...	0.62	
DACCA DIVN.	Gaibanda ...		Weather—cloudy and rainy with high wind. Standing crops doing well. Common rice sells at 12½ seers per rupee. Fodder and water available.
	17 Bogra .. 9, '94 2.32	1.86	
	Sherpur ...	2.20	
	Naekhila ...		Weather—cloudy, rainy and stormy. Prospects of standing crops continue good. The rainfall is seasonable. Common rice sells at 11 to 13 seers per rupee in the Sirajganj sub-division and 12 seers per rupee in the Pabna sub-division. Fodder and water-supply sufficient.
	18 Pabna .. 9, '94 3.84		
	19 Dacca .. 9, '94 Not reported.		Weather—hot and cloudy. Jute and rice plants doing well. Common rice selling from 8 to 10 seers per rupee. Fodder available. There is want of drinking water in many places. No cattle-disease.
	20 Mymensingh .. 9, '94 8.74		Weather—cloudy and showery. Prospects of standing crops good. Common rice sells at 10 to 11 seers per rupee. No cattle-disease. Fodder and water for drinking and domestic purposes available. The river is fast rising.
CHITTAGONG DIVN.	21 Faridpur .. 9, '94 1.61	2.01	Weather—favourable; showers daily. Mornings hot. Prospects of crops very good. Slight damage done by flooding of wheels. Rice 12 seers per rupee at Sadar and 13 seers at Goalundo. Fodder and water sufficient.
	Goalundo ...		
	Madaripur ...	Not reported.	
	22 Backergunge .. 9, '94 4.94	3.02	Weather—seasonable. State and prospects of crops fair. Common rice sells from 10 to 12 seers per rupee. Fodder and water sufficient; but good drinking water somewhat scarce in parts of Pirojpur and Patuakhali sub-divisions.
	Pirojur ...	2.82	
	Patuakhali ...	1.60	
	Bhola ...		Weather—rainy. State and prospects of crops good. Rice is selling at 10 seers per rupee in the Sadar and Chandpur subdivisions and 8½ to 10 seers in the Brahmanbaria subdivision; it is highest in thanas Brahmanbaria and Nasirnagar and lowest in Laksham. Small quantity of <i>aus</i> called <i>Jaita Jali</i> is being reaped in parts of the Brahmanbaria subdivision.
	23 Tippera .. 9, '94 12.31		
	24 Noakhali .. 9, '94 6.29		Weather—cloudy with occasional rain. Prospects of <i>aus</i> good. Sowing of <i>aman</i> continues. Coconuts have been damaged to some extent by the storm of 28th May. No cattle-disease. Fodder and water sufficient. Common rice selling at 9 seers per rupee at Sadar and 10½ seers at Fenny.
	25 Chittagong .. 9, '94 4.60		Weather—seasonable. <i>Pania aus</i> promises well and is being harvested in places. Ploughing in progress. Prices have slightly risen. Water and fodder sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
<b>BIHAR.</b>			
26	Patna June 9, '94	Nil	Weather—hot with westerly wind. Rain urgently needed for ploughing and sowing. Sugarcane is being injured by continued drought. Fodder and water for cattle sufficient. Prices continue normal. Common rice sells at—  Srs. Sadar ... 14½ Barh ... 13 Bihar ... 16 Dinapore ... 16 } per rupee.
	Barh ...	Nil	
	Dinapore ...	Nil	
	Bihar ...	0.02	
27	Gaya " 9, '94	Nil	Weather—exceedingly hot with east wind. Rain much wanted for <i>bhadoi</i> preparations. Harvesting of <i>cheena</i> millet has begun. Prices somewhat above the normal, but practically stationary. Prices of common rice:—  Srs. Sadar ... 13 Jahanabad ... 14½ Aurangabad ... 14 Nawada ... 16½ } per rupee. Fodder supply not quite sufficient, and water-supply getting scanty.
	Jahanabad ...	0.09	
	Aurangabad ...	Nil	
	Nawada ...	0.23	
28	Shahabad " 9, '94	Nil	Weather—hot with east winds. Sugarcane and <i>cheena</i> doing well. Rain wanted for ploughing.
29	Saran " 9, '94	Nil	Weather—seasonable with occasional clouds and continual east winds. Rain in the Gopalganj subdivision has done good to the crops, and agricultural operations there are proceeding well. Rain wanted elsewhere. Water and fodder plentiful. Prices of common rice:—  Srs. c. Chapra ... 13 0 Siwan ... 13 4 Gopalganj ... 13 14 } per rupee.
	Siwan ...	Nil	
	Gopalganj ...	0.80	
30	Champaran " 9, '94	1.71	Very marked fall in temperature in consequence of the rain. Sowing of <i>aghani</i> and <i>bhadoi</i> in progress. Indigo in good condition. Price of common rice 14½ seers per rupee.
31	Muzaffarpur " 9, '94	0.68	Weather—hot and cloudy during the latter part of the week. Standing crops doing well. More rain wanted. Sowing of <i>bhadoi</i> commenced in places. No disease among cattle. Fodder and water ample. Common rice selling at 13 seers per rupee.
	Hajipur ...	Nil	
	Sitamarhi ...	1.83	
32	Darbhanga " 9, '94	0.12	Weather—occasionally cloudy with east wind. All standing crops continue to do fairly well, but a good shower of rain urgently wanted for all agricultural purposes. Fodder and water for cattle sufficient. Price of common rice ranges from 13 to 14 seers per rupee.
33	Monghyr " 9, '94	0.03	Weather—fairly cool and cloudy with strong easterly wind. Some rain has fallen, but much more is urgently needed for cultivation. Indigo and sugarcane thriving well. Condition of cattle good. Sufficient fodder and water. Prices of common rice:—  Srs. Sadar ... 11 to 15 Begusarai ... 15 Jamui ... 15½ } per rupee.
	Begusarai ...	Nil	
	Jamui ...	0.36	
34	Bhagalpur " 9, '94	0.17	Weather—hot and sultry, but cooler than in the previous week. Rain has done good where it has fallen, and <i>bhadoi</i> is being sown in such places. Rain is needed everywhere. Prospects depend on future rainfall. Prices continue normal. Common rice sells at from 15 to 16 seers per rupee. Fodder and water sufficient.
	Banka ...	Nil	
	Madhipura ...	0.30	
	Supul ...	0.25	
35	Purnea " 9, '94	0.96	Weather—cloudy and hot. Weeding of <i>bhadoi</i> and jute nearly over. Rain during the week has done much good. No cattle-disease. Fodder and water sufficient. Price of common rice 16 seers per rupee.
	Kishanganj ...	4.38	
	Araria ...	1.83	



No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.	
BIHAR—concl'd.				
BHAGALPUR DIVN.—concl'd.	36 Malda June 9, '94	3.25	Weather—cloudy and partially rainy. Rain has done much good to the standing crops, specially <i>bhadoi</i> rice and jute. <i>Boro</i> rice still being harvested. Common rice sells at 13 to 16 seers per rupee. Fodder and water available.	
	37 Sonthal Parganas „ 9, '94	2.67	Weather—cloudy with occasional thunderstorms accompanied with a little rain. No crops. Rain has softened the ground, and ploughing and sowing have commenced in some parts of the district. Fodder and water sufficient. Common rice sells at 13 to 17 seers per rupee.	
	Deoghur ...	1.59		
	Godda ...	Nil		
	Jamtara ...	1.46		
	Pakur ...	0.36		
Rajmahal ...	1.28			
ORISSA.				
ORISSA DIVN.	38 Cuttack „ 9, '94	0.11	Weather—somewhat cooler. Cotton maturing. Sugarcane growing. Ploughing going on as also sowing of rice crops. There has been more or less rain in almost all parts of the district, but it is still insufficient in places. Common rice sells at—	
	39 Balasore „ 9, '94	0.22	Weather—cloudy and close early in the week. Comparatively cool from yesterday (8th). Slight rain on 4th and 8th. More expected. Rain wanted everywhere for ploughing and sowing. Sugarcane is reported to be thriving well. Water for cattle is deficient in some parts of the district. Prices of rice:—	
			Srs. c. Srs. c.	
			Sadar ... 10 8 to 12 13	} per rupee.
			Jajpur ... 9 13 to 13 2	
			Kendrapara ... 11 0 to 15 0	
Banki ... 14 0				
40 Puri „ 7, '94	0.07	Weather—cloudy and close early in the week. Comparatively cool from yesterday (8th). Slight rain on 4th and 8th. More expected. Rain wanted everywhere for ploughing and sowing. Sugarcane is reported to be thriving well. Water for cattle is deficient in some parts of the district. Prices of rice:—		
Khurda ...	Nil	Weather—hot with passing clouds. Lands are being ploughed for next rice crop and in places being sown. <i>Dalua</i> is being cut and collected. Miscellaneous crops doing well. Common rice sells from 13 to 16 seers per rupee.		
CHOTA NAGPUR.				
South-West Frontier Agency.				
CHOTA NAGPUR DIVN.	41 Hazaribagh June 9, '94	0.35	Weather—unsettled and rather cooler. Sugarcane doing well. Sowings in seedling beds in progress in places, but otherwise all agricultural operations are at a standstill for want of rain. Fodder and water scarce in many places. Common rice selling at 12 to 14 seers per rupee.	
	Giridi ...	1.06		
	42 Lohardaga „ 9, '94	0.30	Weather—hot and cloudy. Sowing of <i>gora dhan</i> and <i>goondli</i> commenced. Common rice selling at 14 seers per rupee. Fodder and water sufficient.	
	43 Palamau „ 8, '94	Nil	Excessive heat. No rain, but it is urgently wanted for sugarcane and cotton. Rice sells from 13 to 15 seers per rupee.	
	44 Manbhum „ 9, '94	2.36	Weather—hot till evening of 6th instant. Since then rain and wind. Ploughing has begun. Sugarcane prospects improved by rain.	
	Gobindpur ...	2.12		
45 Singbhum „ 9, '94	1.88	Weather—much cooler. The rains seem really to have broken. Ploughing going on everywhere. Sugarcane doing well.		

Published for general information.

CALCUTTA; REVENUE DEPT.,  
The 12th June 1894.C. E. BUCKLAND,  
Secy. to the Govt. Bengal.







## STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

STOCK IN HAND AS COMPILED ON—													
NAMES OF MARKS.	1st week of June 1893.	1st week of July 1893.	1st week of August 1893.	1st week of Sept. 1893.	1st week of Oct. 1893.	1st week of Nov. 1893.	1st week of Dec. 1893.	1st week of Jan. 1894.	1st week of Feb. 1894.	1st week of March 1894.	1st week of April 1894.	1st week of May 1894.	1st week of June 1894.
Balinghata      "      "      "	Mds. 11,73,000	Mds. 10,31,000	Mds. 8,86,000	Mds. 8,07,000	Mds. 7,10,500	Mds. 4,83,000	Mds. 4,11,000	Mds. 3,19,000	Mds. 6,07,000	Mds. 6,08,000	Mds. 9,32,500	Mds. 8,45,000	Mds. 8,81,000
Uladanga      "      "      "	1,17,500	1,19,700	1,09,400	65,000	61,800	53,300	45,400	42,000	53,700	54,900	54,300	58,000	50,700
Chitpur, Golabaree, Kumar- tooly, Haikholia, and Culpai Ghat.	6,68,000	6,63,300	6,64,900	6,84,500	7,06,700	6,25,600	4,77,000	6,42,100	5,60,600	6,48,800	6,20,600	5,79,400	5,71,600
Pathuriachatta, Posta, and Jorabagan.	2,500	3,000	2,000	2,500	3,000	2,000	1,500	2,000	2,500	2,000	2,500	2,000	3,000
Tollygunge, Chetla, Kidderpore, and Munshiganj.	1,70,300	1,53,300	1,31,800	1,21,800	1,17,600	1,06,000	97,600	1,10,300	1,29,900	1,34,300	2,00,500	2,17,350	1,88,600
21 Minor bazars (estimated)...	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000
Other retail shops, 3,129 in number (estimated).	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Baidyabati, Newabganj, Bha- dreshwar, and Chanderuagore.	42,577	28,275	43,200	26,750	10,844	17,344	19,256	17,087	19,138	41,875	53,750	22,400	8,125
Total      "	26,61,777	24,90,575	23,27,400	22,57,050	20,90,944	17,77,344	15,41,756	16,23,087	18,62,893	20,39,875	23,63,150	22,14,150	21,90,025
On Railway premises on both sides of the river.	11,512 (on 3rd June 1893.)	8,805 (on 3rd July 1893.)	12,397 (on 3rd August 1893.)	18,519 (on 3rd Sept. 1893.)	25,127 (on 3rd Oct. 1893.)	8,353 (on 3rd Nov. 1893.)	19,980 (on 3rd Dec. 1893.)	42,994 (on 3rd Jan. 1894.)	38,003 (on 3rd Feb. 1894.)	21,825 (on 3rd March 1894.)	19,534 (on 3rd April 1894.)	18,153 (on 3rd May 1894.)	14,148 (on 3rd June 1894.)
On boats un- missioners' re- loaded ...	19,601 (1st to 3rd June 1893.)	13,314 (1st to 3rd July 1893.)	56,451 (1st to 3rd August 1893.)	29,091 (1st to 3rd Sept. 1893.)	39,729 (1st to 3rd Oct. 1893.)	32,866 (1st to 3rd Nov. 1893.)	35,114 (1st to 3rd Dec. 1893.)	50,635 (3rd to 5th Jan. 1894.)	64,956 (1st to 3rd Feb. 1894.)	49,070 (1st to 3rd March 1894.)	28,147 (1st to 3rd April 1894.)	21,166 (1st to 3rd May 1894.)	45,286 (1st to 3rd June 1894.)
By Canal returns	7,615 (1st to 3rd June 1893.)	14,625 (1st to 3rd July 1893.)	19,737 (1st to 3rd August 1893.)	31,941 (1st to 3rd Sept. 1893.)	34,328 (1st to 3rd Oct. 1893.)	13,581 (1st to 3rd Nov. 1893.)	11,339 (1st to 3rd Dec. 1893.)	51,134 (3rd to 5th Jan. 1894.)	1,35,369 (1st to 3rd Feb. 1894.)	66,413 (1st to 3rd March 1894.)	23,321 (1st to 3rd April 1894.)	18,632 (1st to 3rd May 1894.)	19,619 (1st to 3rd June 1894.)
Grand total of Stocks      "	27,00,505	25,37,379	24,16,535	23,31,501	21,64,901	18,32,274	16,07,489	17,07,790	31,01,166	21,77,192	24,39,202	22,82,101	22,09,078
Probable stock available for exportation by sea.	16½ lakhs	14½ lakhs	13½ lakhs	12½ lakhs	11 lakhs	7½ lakhs	6½ lakhs	7 lakhs	10½ lakhs	11½ lakhs	13½ lakhs	12½ lakhs	12½ lakhs

STATISTICAL DEPARTMENT,  
The 11th June, 1894.

C. E. BUCKLAND,  
Secy. to the Govt. of Bengal.

## Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of May 1894.

	Inches.	Date.	Hour.
The mean pressure of the month	29.612		
The average pressure of May from 24 years' registers	29.656		
The highest pressure in the month	29.861	4th	10
The lowest pressure in the month	29.363	27th	16
The range of pressure	0.498		
The total number of hours of bright sunshine during the month	266.7		
The maximum possible number of hours of sunshine	408.3		
	°		
The mean temperature of the month	87.4		
The average temperature of May from 24 years' registers	86.1		
The highest temperature in the month	105.1	17th	
The lowest temperature in the month	71.6	11th	
The range of temperature during the month	33.5		
The mean daily range of temperature	15.8		
The greatest range of temperature in one day	23.3	17th	
	Per cent.		
The mean humidity of the month	75		
The average humidity of May from 24 years' registers	73		
	Inches.		
The mean vapour tension of the month	0.965		
The average vapour tension of May from 9 years' registers	0.933		
The mean cloud proportion of the month	3.81		
The average cloud proportion of May from 17 years' registers	4.55		
The total rainfall of the month	3.00		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	2.99		
The average fall of May from 48 years' registers	5.40		
The greatest fall in 24 hours	1.51	11th	
	Days.		
The number of rainy days in the month	5		
The average number of rainy days in May from 24 years' registers	13		
	°		
The mean maximum equilibrium temperature of solar radiation during the month	150.8		
The mean difference of sun and air temperatures	55.3		
The greatest sun temperature	157.0	4th & 17th	
The greatest excess of sun over air temperature	61.6	4th	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	76.3		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	3.5		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	10.6	1st	
	Miles.		
The mean movement of the wind per day	213.5		
The greatest movement of the wind in one day	367.0	25th	
The greatest movement of the wind in one hour	23.0		
The number of hours with winds from each of the 8 points—			
N. 1, N.E. 1, E. 22, S.E. 58, S. 371, S.W. 261, W. 15, N.W. 2,		9th	1 to 5 P.M.
Calm 8.		25th	1 to 5 P.M.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore .003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 0.5 higher; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0.6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

J. H. GILLILAND,

METEOROLOGICAL OFFICE, INDIA;  
Calcutta, the 11th June 1894

For Meteorological Reporter to the Govt. of India.



Meteorological Report of the Province of

METEOROLOGICAL DIVISION.	DIVISION.	DISTRICT.	Representative stations.	STATION OBSERVATIONS.												
				AIR PRESSURE.					WIND.		TEMPERATURE.					
				Highest, 8 A.M., barometer reading.	Lowest, 8 A.M., barometer reading.	Mean, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, Lat. 49°.	Variation from normal mean.	Mean direction at 8 A.M.	Mean velocity in miles daily.	Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.	Variation from normal mean.
				29° 766	29° 348	29° 563	29° 608	—072	S19°W	153	112°3	70°2	102°0	79°6	90°8	+3°6
SOUTH-WEST BENGAL.	Burdwan	Burdwan	Burdwan	29° 608	29° 107	29° 326	29° 605	—077	S88°E	270	114°8	73°9	105°8	80°5	93°2	+4°1
		Birbhum	.....													
		Bankura	Bankura	29° 548	29° 140	29° 328	29° 572	—063	S27°E	126	117°1	73°6	106°8	80°5	93°7	+4°7
		Midnapore	Midnapore	29° 721	29° 334	29° 531	29° 624	—048	S9°W	154	117°4	74°1	106°1	80°0	93°1	+4°3
		Hooghly	.....													
	Presidency	Howrah	.....													
		24-Parganas	Saugor Island	29° 807	29° 505	29° 670	29° 639	—047	S6°W	556	94°7	74°5	92°8	83°3	88°0	+2°0
		Calcutta	Calcutta	29° 851	29° 464	29° 659	29° 625	—058	S15°W	213	104°9	71°7	95°9	79°7	87°9	+2°7
		Nadia	Krishnagar	29° 821	29° 418	29° 621	29° 615	—051	S12°E	219	105°2	68°2	99°1	77°9	88°5	+2°1
		Murshidabad	Berhampore	29° 813	29° 374	29° 604	29° 619	—064	S21°E	131	112°7	69°7	101°5	78°4	90°0	+4°1
NORTH BENGAL.	Rajshahi	Jessore	Jessore*	29° 847	29° 453	29° 600	29° 659	—058	S5°E	128	104°0	68°9	98°1	77°3	87°7	+2°4
		Khulna	.....													
		Rajshahi	Rampur Boalia	29° 796	29° 351	29° 593	29° 612	—068	S3°E	175	105°0	69°6	97°4	77°8	87°6	+3°1
		Dinajpur	Dinajpur	29° 750	29° 332	29° 505	29° 642	—063	S31°E	70	102°6	69°2	93°7	75°3	84°5	+2°1
		Jalpaiguri	Jalpaiguri	29° 600	29° 220	29° 435	29° 677	—055	E	115	94°9	70°1	88°7	73°1	81°0	+1°6
	Kuch Bihar	Darjeeling	Darjeeling	23° 056	22° 752	22° 907	—	—035	N18°W	201	67°6	40°1	63°8	53°5	58°8	+2°1
		Gnatong	.....	?	?	?	?	?	S99°E	126	58°4	31°5	48°2	36°3	42°3	—
		Rangpur	Rangpur(b)	29° 762	29° 368	29° 559	29° 640	—085	S79°E	78	95°8	68°7	90°3	78°5	81°9	+1°4
		Bogra	Bogra	29° 795	29° 418	29° 624	29° 637	—040	S66°E	101	102°3	67°2	94°0	74°6	84°3	+1°1
		Pabna	Sirajganj	29° 824	29° 417	29° 647	29° 646	—057	S46°E	147	102°3	66°3	93°3	73°8	83°4	+1°2
EAST BENGAL.	Dacca	Dacca	Narayanganj	29° 838	29° 489	29° 686	29° 654	—058	S14°E	242	99°6	67°7	92°5	76°1	84°3	+1°1
		Mymensingh	Mymensingh	29° 818	29° 441	29° 600	29° 670	—057	S73°E	153	97°7	69°6	89°4	73°6	81°5	+0°6
		Faridpur	Faridpur	29° 853	29° 459	29° 670	29° 664	—053	S13°E	111	98°5	67°9	89°6	75°9	82°8	—0°1
		Backergunge	Barisal	29° 856	29° 519	29° 695	29° 653	—050	S2°E	167	98°3	69°9	92°7	77°5	85°1	+1°3
		Tippera	Comilla	29° 857	29° 508	29° 696	29° 680	—046	S57°E	202	99°8	67°8	91°3	74°2	82°8	+0°4
	Chittagong	Noakhali	Noakhali	29° 834	29° 523	29° 637	29° 677	—035	S14°E	191	97°0	67°4	89°6	75°9	82°8	+0°7
		Chittagong	Chittagong	29° 881	29° 551	29° 682	29° 715	—026	S40°E	187	96°2	68°6	89°2	75°0	82°1	+0°5
		South Lushai Hills	.....													
		Patna	Bankipore	29° 680	29° 223	29° 447	29° 580	—078	N87°E	162	114°1	75°2	105°1	80°1	92°6	+4°2
		Gaya	Gaya*	29° 407	29° 043	29° 246	29° 565	—074	N81°E	187	114°1	71°8	108°8	82°3	95°6	+4°5
BIHAR.	Patna	Shahabad	Dehri	29° 446	29° 100	29° 282	29° 576	—053	S39°W	192	114°5	73°0	108°4	82°6	93°5	+3°5
			Ruxar	29° 500	29° 188	29° 391	29° 581	—059	N23°E	166	111°9	74°8	106°1	80°7	93°4	+3°5
			Arrah	29° 640	29° 218	29° 435	29° 572	—060	N72°E	122	110°9	75°5	106°4	80°5	93°6	+3°9
		Saran	Chapra	29° 677	29° 240	29° 400	29° 591	—050	S54°E	174	113°2	75°6	104°9	79°8	92°4	+3°8
		Champanan	Metihari	29° 638	29° 184	29° 420	29° 599	—064	S87°E	184	108°0	68°8	100°1	76°4	88°3	+3°0
	Bhagalpur	Muzaffarpur	Muzaffarpur	29° 693	29° 257	29° 470	29° 600	—	S69°E	163	109°2	71°2	101°1	77°7	89°4	—
		Darbhanga	Darbhanga	29° 717	29° 258	29° 481	29° 599	—080	S70°E	166	107°0	70°2	98°3	77°8	85°1	+2°5
		Monghyr	.....													
		Bhagalpur	Bhagalpur	29° 735	29° 240	29° 481	29° 593	—063	S77°E	96	111°8	71°0	101°3	77°2	89°3	+3°2
		Purnea	Purnea	29° 773	29° 301	29° 543	29° 621	—069	N82°E	159	106°3	70°2	97°1	76°2	86°7	+2°6
ORISSA.	Orissa	Malda	Malda*	29° 802	29° 331	29° 584	29° 607	—064	S27°E	112	112°5	70°0	100°7	77°6	89°2	+3°6
		Sonthal Parganas	Naya Dumka	29° 368	28° 918	29° 151	29° 587	—062	S43°E	162	114°7	72°8	104°4	80°0	92°2	+4°4
		Cuttack	Cuttack	29° 761	29° 443	29° 602	29° 623	—053	S18°W	142	111°3	78°9	105°3	82°1	93°7	+3°2
		False Point	.....	29° 847	29° 525	29° 686	29° 648	—034	S30°W	405	93°0	76°6	99°9	81°8	86°4	+1°2
		Balasore	Balasore	29° 809	29° 427	29° 613	29° 614	—036	S29°W	268	111°0	73°8	100°2	80°1	90°1	+3°3
	Chota Nagpur.	Puri	Puri	29° 830	29° 524	29° 678	29° 633	—	S45°W	426	94°7	76°1	89°6	82°5	86°1	—
		Gopalpur	.....	29° 831	29° 530	29° 675	29° 636	—	S30°W	518	97°2	76°1	89°9	80°2	85°1	—
		Hazaribagh	Hazaribagh	27° 845	27° 503	27° 683	29° 579	—040	S72°W	262	108°6	70°3	102°6	78°6	90°6	+4°3
		Lohardaga	Ranchi	27° 715	27° 401	27° 569	29° 577	—041	S53°W	201	107°5	69°9	102°2	78°2	90°2	+4°2
		Palamau	Daltonganj	?	?	?	?	?	N20°W	208	114°7	70°0	110°5	80°7	95°6	—
ASSAM.	COTA NAGPUR.	Manbhum	.....													
		Singbhum	Chalbassa	29° 063	28° 707	28° 894	29° 582	—048	S74°W	74	117°8	75°2	(a) 109°5	82°8	(a) 16°5	+5°4
		Sibsagar	Sibsagar	29° 561	29° 265	29° 413	29° 704	—067	N59°E	63	93°2	68°0	84°2	71°0	77°6	—1°3
		Golpara	Dhubri	29° 789	29° 404	29° 698	29° 672	—062	N87°E	185	95°2	68°1	88°7	74°1	81°4	+2°0
COTA NAGPUR.	CACHAR.	Cachar	Silchar	29° 799	29° 516	29° 661	29° 717	—044	N76°E	101	96°6	69°2	88°2	72°4	80°3	+0°3

\* Mean of 30 days.

(a) Mean of 28 days.

(b) Mean of 27 days.

(1) Mean of 25 days.





Table of Rainfall recorded at station

Division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
SOUTH-WEST BENGAL.	Burdwan.	Burdwan	...	...	...	...	...	2.87	...	0.07	...	...	1.35	...	0.15	...	...	...	...	...	...	0.0
		Kalna	0.05	0.25	...	...	...	1.47	...	0.30	0.50	...	0.19	0.03	0.24	...	...	...	...	...	...	0.0
		Katwa	...	0.11	...	...	...	...	...	0.41	...	0.38	1.62	0.04	0.29	...	...	...	...	...	...	...
		Raiganj	...	...	...	0.01	...	0.60	...	0.03	...	...	2.42	0.09	...	...	...	...	...	...	...	...
		Mauker	...	...	...	...	...	...	...	...	0.14	0.90	...	...	...	...	...	...	...	...	...	...
		Sori	...	...	...	0.01	...	0.17	...	0.01	...	...	0.44	0.41	0.20	...	...	...	...	...	...	...
		Hetampur	...	...	...	...	...	0.66	...	0.03	...	...	...	0.04	...	...	...	...	...	...	...	...
		Rampur Hat	...	0.02	...	...	...	0.04	...	0.27	1.10	...	0.70	...	...	...	...	...	...	...	...	...
		Bolpur	...	...	...	...	...	...	...	0.70	...	...	1.65	0.20	0.41	...	...	...	...	...	...	...
		Murari	...	...	...	...	...	...	...	0.17	...	...	0.40	...	...	...	...	...	...	...	...	...
		Labpur	...	...	...	...	...	0.10	...	0.62	...	0.12	1.10	0.57	0.20	0.19	...	...	...	...	...	...
		Bankura	...	...	...	...	...	0.07	0.01	...	0.24	0.65	...	0.34	...	...	...	...	...	...	...	...
		Vishnupur	...	...	0.19	...	...	0.07	...	0.33	...	0.73	...	1.21	...	...	...	...	...	...	...	...
		Maliara	...	...	...	...	...	...	...	0.50	0.71	...	...	0.24	...	...	...	...	...	...	...	...
		Khatra	...	...	...	...	...	...	...	0.52	...	0.23	...	0.64	...	...	...	...	...	...	...	...
		Indas	...	...	...	...	...	...	...	0.72	...	...	...	0.06	...	...	...	...	...	...	...	...
		Kotalpur	...	0.31	...	...	...	1.60	...	0.53	...	...	0.11	0.30	...	...	...	...	...	...	...	...
		Onda	...	...	0.15	...	...	...	...	...	0.05	...	0.08	...	...	...	...	...	...	...	...	...
		Gangajaghri	...	...	...	...	...	0.08	...	0.12	0.26	...	...	0.16	...	...	...	...	...	...	...	...
		Kaipur	...	...	...	...	...	1.67	...	0.86	...	...	...	0.12	...	...	...	...	...	...	...	...
		Sonamukhi	...	...	...	...	...	...	...	0.81	...	...	...	...	...	...	...	...	...	...	...	...
		Contai	...	...	...	...	...	...	...	...	0.18	0.30	0.20	0.19	...	...	...	...	...	...	...	...
		Tamluk	...	...	...	...	...	...	...	...	0.34	0.20	0.10	0.23	...	...	...	...	...	...	...	...
		Midnapore	...	...	...	...	...	...	...	0.05	...	...	0.03	0.42	0.51	...	...	...	...	...	...	0.0
		Ghatal	0.11	...	...	...	...	0.02	...	...	0.32	0.28	0.03	0.70	...	...	...	...	...	...	...	0.4
		Kukrahaty	...	...	...	...	...	...	...	...	0.46	1.09	0.42	...	...	...	...	...	...	...	...	0.4
		Garbhata	...	...	...	...	...	0.50	...	...	0.65	...	0.40	0.60	...	...	...	...	...	...	...	0.3
		Panskura	...	...	...	...	...	...	...	...	...	0.40	0.74	0.58	...	...	...	...	...	...	...	...
		Dantoon	...	...	...	...	...	...	...	...	...	0.26	0.54	0.06	0.29	0.42	...	...	...	...	...	...
		Serampore	...	...	...	...	...	...	...	...	...	...	1.04	...	...	...	...	...	...	...	...	...
		Hooghly	...	...	...	...	...	...	...	...	0.37	...	...	0.12	...	...	...	...	...	...	...	...
		Hooghly	...	...	...	...	...	...	...	...	...	0.61	0.02	0.95	0.20	...	...	...	...	...	...	...
		Jahannabad	...	...	...	...	...	...	...	...	0.13	0.16	0.45	1.21	...	...	...	...	...	...	...	...
		Howrah	...	...	...	...	...	...	...	...	...	0.74	0.31	0.35	0.56	...	...	...	...	...	...	...
		Moheesreka	0.10	...	...	...	...	...	...	...	...	0.23	...	0.15	...	...	...	...	...	...	...	...
		Ulubaria	...	...	...	...	...	...	...	...	...	...	...	1.95	...	...	...	...	...	...	...	...
		24-Perkasas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Saugor Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Diamond Harbour	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Canning Town	...	...	...	...	...	...	...	...	...	...	0.75	...	0.95	...	...	...	...	...	...	...
		Alipore (Observatory)	...	...	...	...	...	...	...	...	...	0.16	1.51	0.32	...	...	...	...	...	...	...	...
		Barrackpore	...	...	...	...	...	...	...	...	0.08	0.56	0.05	0.18	0.18	...	...	...	...	...	...	...
		Dum Dum	...	...	...	...	...	...	...	...	0.22	0.06	0.69	0.05	0.16	...	...	...	...	...	...	...
		Barasat	...	...	...	...	...	...	...	...	...	0.10	0.70	...	...	...	...	...	...	...	...	...
		Basirhat	...	...	...	...	...	...	...	...	...	...	1.33	...	...	0.25	0.11	...	...	...	...	...
		Ronaghat	...	...	...	...	...	...	...	...	...	1.20	1.48	...	0.53	...	...	...	...	...	...	...
		Krishnagar	...	0.89	...	...	...	...	...	...	...	...	1.34	...	0.36	...	...	...	...	...	...	...
		Chudanga	...	1.43	...	...	...	0.21	...	0.68	...	...	...	...	...	...	...	...	...	...	...	...
		Meherpur	0.25	0.35	...	...	...	...	...	0.69	0.33	0.40	1.64	...	...	0.14	...	...	...	...	...	...
		Keshi	...	0.55	...	...	...	...	...	1.30	0.35	1.45	0.60	...	...	...	...	...	...	...	...	...
		Murshidabad	...	...	...	...	...	...	...	0.60	0.20	0.37	0.67	...	...	...	...	...	...	...	...	...
		Kandi	0.70	1.15	...	...	...	...	...	0.70	0.12	0.83	2.00	...	...	...	...	...	...	...	...	1.7
		Berhampore	...	0.07	...	...	...	0.05	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Balbach	...	0.39	...	...	...	0.08	...	0.17	...	0.01	0.84	...	...	...	...	...	...	...	...	...
		Asimganj	...	...	...	...	...	...	...	0.20	...	1.50	...	...	...	...	...	...	...	...	...	...
		Jaugipur	...	...	...	...	...	...	...	0.45	...	...	1.05	...	...	...	...	...	...	...	...	...
		Lalgola	...	...	...	...	...	...	...	0.07	0.46	...	...	...	...	...	...	...	...	...	...	...
		Akhiganj	...	...	...	...	...	...	...	0.50	0.30	...	1.00	...	...	...	...	...	...	...	...	...
		Katigari	...	0.42	...	...	...	0.39	...	0.47	...	...	0.77	...	...	...	...	...	...	...	...	...
		Narail	...	0.20	...	...	...	...	...	1.35	...	0.90	0.60	...	...	...	...	...	...	...	...	...
		Jessore	...	0.65	...	...	...	...	...	...	1.61	0.39	0.78	...	...	...	...	...	...	...	...	...
		Jhenidah	...	0.61	...	...	...	...	...	...	0.58	1.79	1.18	...	0.02	0.02	...	...	...	...	...	0.11
		Magara	...	0.55	...	...	...	...	...	0.38	0.72	...	1.90	...	0.05	...	...	...	...	...	...	0.90
		Jangraon	...	0.86	...	...	...	...	...	0.40	0.10	1.61	...	...	...	...	...	...	...	...	...	0.4
		Satkhura	...	...	...	...	...	...	...	...	1.17	...	1.07	...	0.50	...	...	...	...	...	...	0.20
		Bagerhat	...	...	...	...	...	...	...	...	0.42	0.54	...	...	...	...	...	...	...	...	...	...
		Khulna	...	...	...	...	...	...	...	...	0.31	1.89	1.60	...	...	...	...	...	...	...	...	...
		Nakipur	...	0.21	...	...	...	...	...	...	1.16	2.29	1.33	...	...	...	0.20	...	...	...	...	0.0
		Rampal	...	...	...	...	...	...	...	...	...	0.33	2.83	...	...	...	...	...	...	...	...	...
		Isalia	...	...	...	...	...	...	...	0.82	0.03	...	0.17	...	...	...	...	...	...	...	...	...
		Nator	...	0.24	...	...	...	...	...	1.15	0.20	0.09	0.67	...	0.30	...	...	...	...	...	...	...
		Naugaon	...	0.30	...	...	...	...	...	3.27	...	0.09	0.70	...	2.12	...	...	...	...	...	...	...
		Lalpur	...	...	...	...	...	...	...	...	0.28	0.85	...	...	...	...	...	...	...	...	...	...
		Menda	...	0.50	...	...	...	0.52	...	...	0.30	0.18	...	...	0.58	...	...	...	...	...	...	...
		Dinajpur	...	...	0.34	0.06	...	0.71	...	0.33	0.14	0.09	...	...	2.18	...	...	...	...	...	...	...
		Mahadebpur	...	...	...	0.15	...	...	...	0.13	...	0.01	...	...	0.29	0.39	...	...	...	...	...	...
		Churamon	...	...	...	...	...	...	...	0.05	...	...	...	...	1.28	1.39	...	...	...	...	...	...
		Raiganj	...	...	...	...	...	...	...	0.04	0.02	...	...	...	1.28	4.47	...	...	...	...	...	...
		Dinajpur	...	...	...	...	...	...	...	0.26	...	0.14	...	...	0.15	...	...	...	...	...	...	...
		Baloorghat	...	...	...	0.17	...	...	...	0.68	0.54	...	0.35	0.87	1.18	...	...	...	...	...	...	...
		Thakurgaon	...	...	...	...	...	...	...	...	1.21	0.24	0.19	0.65	...	1.23	1.25	0.36	...	0.21	...	...
		Jalpaiguri	...	...	...	...	...	...	...	...	0.17	0.49	...	...	...	0.20	0.80	1.79	0.57	...	0.75	0.04
		Alipore Duar	...	...	...	...	...	...	...	...	0.62	0.08	0.41	0.67	2.19	0.						





Table of Rainfall recorded at Stations

Metereological Division.	Division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
EAST BENGAL.	Dacca.	Dacca	Munshiganj	...	...	...	...	...	...	...	...	1.05	0.60	0.05	...	...	0.75	0.12	...	...	0.05	...	2.16		
			Dacca	...	0.07	...	...	...	...	...	...	0.45	1.37	0.41	...	...	0.84	0.57	...	...	0.13	...	0.96		
			Narainan]	...	...	...	...	...	...	...	...	0.90	0.53	0.04	...	...	0.41	0.91	...	...	0.56	...	1.19		
			Manikganj	0.07	0.42	...	...	...	...	...	...	0.20	1.24	0.24	...	0.18	0.92	0.45	...	...	...	...	0.90		
		Mymensingh.	Joydebpur	...	...	...	...	...	...	...	...	0.53	3.31	0.22	...	0.04	0.22	0.17	...	...	...	...	0.72		
			Kishoreganj	...	0.42	...	...	...	...	...	...	...	...	0.47	0.07	0.21	...	1.78	...	0.19	0.93	0.95	...	0.16	0.08
			Atia (Tangail)	...	...	...	...	...	...	...	...	...	...	0.17	0.04	0.20	0.35	...	...	0.25	...	...	...	0.38	
			Mymensingh	...	0.01	...	...	...	...	...	0.01	0.28	0.18	0.03	0.01	0.04	1.25	0.70	...	1.20	0.25	0.12	0.14	0.01	
		Faridpur	Jamalpur	...	...	...	...	...	...	...	1.31	0.39	0.15	0.09	0.09	...	1.02	0.82	...	...	...	...	...	...	
			Netrokona	...	...	...	...	...	...	...	...	...	0.56	...	0.35	...	0.95	...	...	1.65	3.88	1.50	1.30	...	
			Subarnakhali	...	...	...	...	...	...	...	...	0.38	0.27	0.07	0.72	...	0.55	...	0.19	...	...	...	0.72	0.22	
			Turgapur	...	...	...	...	...	...	0.30	...	0.20	0.50	0.10	...	3.00	0.70	0.10	...	1.00	0.10	2.20	1.60	0.30	
Backergunge.	Sherpur Town	...	...	...	...	...	...	...	0.23	0.41	0.73	0.02	...	...	1.82	...	0.65	0.12	0.53	0.22	...	...			
	Dewanganj	...	...	1.12	...	...	...	...	...	0.82	...	...	...	...	1.85	...	0.54	...	0.28	0.41	0.18	...			
	Madaripur	...	0.04	...	...	...	...	...	...	...	0.53	1.02	0.05	...	...	...	...	...	...	0.27	...	0.36			
	Faridpur	0.06	0.60	...	...	...	...	...	...	...	0.55	0.58	2.72	...	...	...	...	0.03	...	1.02	...	0.27			
CHITTAGONG.	Chittagong.	Gomundo	...	0.80	...	...	...	...	...	...	0.10	0.30	0.92	1.20	...	...	...	...	...	...	...	0.90			
		Patuakhali	...	...	...	...	...	...	...	...	...	0.20	2.00	0.42	...	...	0.35	...	...	...	...	...			
		Pirojpur	...	...	...	...	...	...	...	...	...	0.65	1.36	0.95	...	...	0.27	...	...	...	...	...			
		Barisal	...	...	...	...	...	...	...	...	...	0.74	0.86	0.36	...	...	1.27	...	...	...	...	...			
	Hill Tippera	Gournaddi	...	...	...	...	...	...	...	...	...	0.79	0.51	0.07	...	...	1.16	...	...	...	...	...			
		Islah	...	...	...	...	...	...	...	...	...	1.40	2.07	0.62	...	...	0.72	...	...	...	...	0.62			
		Doulatkhan	...	...	...	...	...	...	...	1.90	1.33	0.40	...	...	...	0.50	...	...	...	...	...	...			
		Bauphal	...	...	...	...	...	...	...	...	...	2.70	0.28	...	...	...	0.72	...	...	...	...	...			
	Tippera	Agartola	...	...	...	...	...	...	...	...	...	...	1.56	...	...	...	0.90	...	0.58	...	...	...			
		Comilla	...	...	...	...	...	...	...	...	...	2.30	2.52	1.05	...	0.70	0.58	0.15	...	...	0.06	...	0.47		
		Chandpur	...	...	...	...	...	...	...	...	...	1.40	1.37	0.35	...	0.14	...	0.47	...	...	0.44	...	0.63		
		Brahmanbaria	...	...	...	...	...	...	...	...	...	0.55	0.08	...	...	...	2.14	0.78	...	1.65	...	0.38	0.58		
CHITTAGONG.	Chittagong.	Ramchandrapur.	...	...	...	...	...	...	...	0.45	1.20	0.50	...	...	...	0.30	...	...	...	...	...	...			
		Nasirnagar	...	...	...	...	0.85	...	...	...	...	1.26	0.11	0.67	...	1.75	...	0.85	0.75	0.65	...	0.70	...		
		Daudkandi	...	...	...	...	...	...	...	...	1.66	1.50	0.50	...	...	0.42	0.43	...	...	0.07	...	0.76	...		
		Kasba	...	...	...	...	...	...	...	...	0.90	0.95	0.70	...	...	...	...	...	0.35	0.55	...	...	...		
		Neakhali	Laksham	...	...	...	0.50	...	...	...	...	...	1.05	1.00	0.25	...	1.86	1.50	...	...	...	...	0.40		
			Nonkhali	...	...	...	...	...	...	...	...	...	2.52	0.94	0.11	...	0.84	0.87	0.40	...	...	0.80	...	0.02	
			Fenny	...	...	...	...	...	...	...	...	...	1.40	1.10	0.03	...	1.05	1.06	0.63	...	...	...	0.05	1.23	
			Harishpur	0.04	...	...	0.01	...	...	...	...	...	2.56	2.30	0.98	...	0.04	0.11	0.92	...	...	0.53	...	...	
		Chittagong	Ramganj	...	...	...	...	...	...	...	...	...	1.05	0.41	0.60	...	...	0.46	0.29	...	...	0.31	...	...	
			Cox's Bazar	...	...	...	...	...	...	...	...	...	0.09	0.78	0.62	...	...	...	...	0.01	...	...	...	0.28	
			Chittagong	...	...	...	...	...	...	...	...	...	0.08	0.91	0.24	0.10	0.33	0.95	0.26	0.10	...	0.77	...	...	
			Kutubdia	...	...	...	...	...	...	...	...	...	0.98	1.73	0.25	...	...	0.28	...	0.21	...	...	...	3.50	
South Lushai Hills.	Satkanya	...	0.03	...	...	...	...	...	...	...	2.35	1.34	0.40	...	...	...	...	...	...	...	...	0.60			
	Kodala	...	0.10	...	...	...	...	...	...	...	1.60	0.80	0.25	...	...	0.20	0.05	0.10	...	...	0.19	0.21			
	Fenosa	...	...	...	...	...	...	...	...	...	2.73	1.40	0.20	...	...	0.84	0.25	...	...	...	...	...			
	Misraai	...	...	...	...	0.61	...	...	...	...	2.58	2.67	0.62	...	...	1.22	1.54	0.25	0.03	...	...	0.19			
CHITTAGONG.	Chittagong.	Patna	Chandpur	0.18	...	...	...	...	...	...	...	1.12	0.80	1.33	...	...	0.90	0.14	...	...	0.50	...	0.96		
			Kacharabati	...	...	...	...	...	...	...	...	0.17	2.66	0.37	0.18	...	0.25	1.25	0.34	...	...	...	0.69		
			Bandarban	...	...	...	...	...	...	...	...	...	1.61	0.88	0.37	...	...	0.41	0.14	...	...	...	1.10		
			Demagiri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
		Gaya	Patna	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Dinapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Bihar	0.15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Barn	...	...	...	0.17	...	...	...	...	...	1.09	...	...	...	...	...	...	...	...	...	...	...	
		Shahabad	Bickram	...	...	...	0.10	...	...	...	...	...	0.09	...	...	...	...	...	...	...	...	...	...	...	
			Hilsa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Surungabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Gaya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
CHITTAGONG.	Chittagong.	Shahabad	Nawada	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
			Jahanabad	...	...	...	...	...	...	...	...	...	0.98	...	...	...	...	...	...	...	...	...	...		
			Arwal	...	...	...	...	...	...	...	...	...	0.69	...	...	...	...	...	...	...	...	...	...		
			Daudnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
		Shahabad	Sherghati	...	...	...	...	...	...	...	...	...	0.37	...	...	...	...	...	...	...	...	...	...	...	
			Kajauli	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Pakri Bara	...	...	...	...	...	...	...	...	...	0.17	...	...	...	...	...	...	...	...	...	...	...	
			Man.	...	...	0.30	...	...	...	...	...	...	0.21	...	...	...	...	...	...	...	...	...	...	...	
		Shahabad	Buxar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Behri	...	...	...	...	...	...	...	...	...	0.04	...	...	...	...	...	...	...	...	...	...	...	
			Bhabhua	...	...	...	...	...	...	...	...	...	0.12	0.70	...	...	...	...	...	...	...	...	...	...	
			Sasaram	...	...	...	...	...	...	...	...	...	...	0.70	...	...	...	...	...	...	...	...	...	...	
CHITTAGONG.	Chittagong.	Shahabad	Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
			Mohanea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
			Khiri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
			Ageon	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
		Shahabad	Ramagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Koath	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Sikron	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Bassawan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Shahabad	Monaharpur	...	...	...	...	...	...	...	...	...	0.16	...	...	...	...	...	...	...	...	...	...	...	
			Wojalsanj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Siwan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
			Ekdia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
CHITTAGONG.	Chittagong.	Shahabad</																							

in Bengal in May 1894—continued.

31	29	25	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Least rainfall during the month.	Total rainfall from 16th May to 31st May 1894.	Average rainfall from 16th May to 31st May.	Station.	Distri. ts.	Division.	Meteorological Divi- sion.
...	...	...	0.86	1.76	...	...	...	0.40	3.75	9	11.24	11.55	9.43	3.75	8.08	4.13	Munshiganj ...	Dacca.	Dacca.		
...	...	...	1.01	1.31	...	...	...	0.49	0.41	11	11.10	8.11	8.95	1.37	4.40	4.36	Dacca				
...	...	...	0.87	1.95	...	...	...	0.34	1.45	10	11.71	9.15	8.20	1.95	6.36	3.58	Narainganj.				
0.25	0.33	0.09	1.25	0.91	...	...	0.09	0.45	...	12	10.29	7.57	8.85	1.25	3.85	3.87	Manikganj.				
...	...	...	1.04	2.19	...	...	0.08	0.07	...	10	?	9.12	?	3.31	4.63	?	Joydebpur.				
1.33	0.26	2.09	0.22	0.50	0.05	...	1.23	...	0.11	15	11.74	11.05	10.19	2.09	7.91	4.37	Kishoreganj.	Mymensingh.			
0.63	0.75	0.95	2.00	1.00	...	...	...	...	...	10	9.79	6.72	7.04	2.00	5.71	3.23	Atis (Tangail).				
0.10	0.36	2.24	0.05	0.62	0.16	...	0.63	...	0.03	14	13.05	8.61	11.03	2.24	6.10	5.83	Mymensingh.				
...	0.38	0.39	0.38	...	0.18	...	0.75	...	...	10	10.32	6.75	8.79	1.61	2.28	4.03	Jamalpur.				
0.32	1.02	2.13	0.05	0.73	2.96	0.52	0.85	...	0.22	15	12.63	19.00	11.46	3.88	17.14	5.15	Netrokona.				
...	...	1.19	0.75	1.95	...	...	0.11	0.02	...	11	?	7.14	?	1.95	4.96	?	Subarnakhal.				
0.15	...	1.10	1.00	...	0.30	0.90	1.30	0.70	...	19	?	15.75	?	3.00	10.85	?	Dargapur.				
0.08	0.91	0.70	0.25	...	...	...	1.00	...	...	13	?	8.00	?	1.82	4.46	?	Sherepur Town.				
0.28	1.50	...	...	...	...	...	...	...	...	9	?	6.08	?	1.85	2.65	?	Deuadiganj.				
...	...	...	0.29	...	...	...	0.09	0.39	...	7	10.05	3.14	9.24	1.02	1.50	3.63	Madaripur.	Faajdpur.	Dacca.		
...	...	...	1.16	...	...	...	0.28	...	0.75	10	10.70	8.43	8.90	2.72	3.92	4.19	Faridpur.				
...	...	...	1.60	...	...	...	...	...	...	8	9.89	6.32	7.63	1.60	3.00	3.64	Goalundo.				
...	...	...	0.12	...	...	...	...	1.15	...	7	9.50	4.85	8.23	2.00	1.88	4.37	Patuakhali ...	Backergunge.			
...	...	...	0.19	0.80	...	...	...	...	0.20	8	8.63	6.23	7.10	1.81	3.00	3.22	Protpur.				
...	...	...	1.33	...	...	...	...	0.75	...	7	10.00	8.40	8.03	3.07	5.17	3.88	Barisal.				
...	...	...	0.21	...	...	...	0.06	0.46	...	7	?	4.18	?	1.16	1.65	?	Gournaddi.				
...	...	...	0.74	...	...	...	0.56	0.11	0.45	8	9.84	6.67	7.24	2.07	1.86	3.46	Rhoia.				
...	...	...	0.15	...	...	...	0.20	1.10	3.97	8	?	9.55	?	3.97	5.42	?	Doulatkhan.				
...	...	...	0.58	...	...	...	0.62	...	2.82	6	?	7.72	?	2.82	4.02	?	Bauphal.				
1.15	...	0.20	0.52	0.30	...	...	1.30	1.90	0.40	10	11.53	8.81	10.74	1.90	6.35	3.10	Agartala.	Hill Tippera.	Chittagong.	EAST BANGAL.	
...	...	...	0.36	0.75	...	...	0.50	0.53	0.20	12	11.47	10.44	10.35	2.52	2.94	4.34	Comilla.				
...	...	...	0.02	1.61	0.04	...	0.64	1.08	...	12	12.00	8.19	8.63	1.61	4.46	4.00	Chandpur.	Tippera.			
2.12	...	2.62	0.31	...	0.12	...	0.75	1.25	...	12	11.84	13.41	10.81	2.62	9.86	4.40	Brahmanbar a				
...	0.50	0.90	1.45	...	0.70	...	...	...	...	8	?	6.00	?	1.45	3.55	?	Ramchandra- pur.				
1.70	0.85	1.85	1.05	...	0.85	...	1.70	1.50	0.70	17	?	17.69	?	1.85	12.39	?	Nasirnagar.				
...	...	0.68	0.56	...	...	...	0.53	3.20	...	10	?	10.11	?	3.20	5.60	?	Daudkandi.				
...	1.15	0.85	1.75	...	1.90	...	1.4	2.00	...	11	?	12.50	?	2.00	9.95	?	Kasha.				
...	...	0.10	0.90	...	...	...	1.09	0.59	...	11	?	9.24	?	11.50	3.08	?	Laksham.				
...	...	1.65	2.24	0.05	...	...	0.61	0.04	1.74	2.03	11	10.06	14.26	9.82	2.52	8.58	4.54	Noakhali			Noakhali.
0.07	...	0.48	1.28	0.05	...	...	0.53	1.03	0.53	12	11.85	11.37	10.97	1.40	6.10	4.52	Fenny.				
...	0.05	1.24	1.41	0.04	0.05	0.10	2.11	2.12	2.35	1.09	12	?	17.25	?	2.56	11.10	?	Harishpur.			
...	...	...	1.44	...	...	...	0.36	1.08	1.69	...	...	...	...	...	...	...	Ramganj.				
1.11	1.18	1.00	3.83	...	1.65	0.11	0.34	1.07	1.67	1.80	13	10.11	15.44	10.36	3.83	14.05	5.18	Cox's Bazar			
1.52	0.68	1.95	3.24	...	0.15	0.29	2.08	0.18	2.30	0.42	19	9.90	17.12	9.63	3.24	13.59	4.76	Chittagong.	Chittagong ...		
4.98	1.60	0.22	3.60	...	0.19	0.28	5.36	1.36	...	...	...	...	...	...	...	...	?	Kuluddia.			
0.59	0.50	0.30	2.92	...	...	0.08	0.91	1.65	1.54	1.80	14	?	16.79	?	2.92	11.00	?	Satkania.			
0.63	...	1.60	...	0.03	0.08	1.34	1.25	1.41	3.83	0.02	...	...	...	...	...	...	?	Kodala.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	?	Fenola.			
...	0.08	1.32	0.74	...	0.27	0.09	0.69	1.18	0.56	14	?	14.64	?	2.67	5.15	?	Mirsarai.				
0.65	...	4.10	...	0.17	0.06	1.29	1.13	...	1.80	2.91	16	?	17.95	?	4.10	13.48	?	Chandpur.			
0.28	0.08	2.78	0.73	...	...	0.09	1.48	1.56	2.05	2.77	14	11.50	17.11	10.13	2.78	11.89	4.16	Ramganj.	South Lushai hills.		
0.69	0.57	0.26	3.46	...	0.02	...	1.43	0.21	1.13	1.65	14	?	13.92	?	3.45	10.51	?	Bandarban.			
...	...	...	...	...	...	...	...	...	...	...	Nil	3.15	Nil	Nil	Nil	1.51	?	Demagiri.	Patna.		
...	...	...	...	...	...	...	...	...	...	0.15	2.20	Nil	1.69	Nil	1.17	1.38	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1	2.40	0.19	2.26	0.10	1.35	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	Nil	?	?	?	?	?	?	Patna			
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...	...	...	...	...	...	...	...	...	...	...	1	2.53	2.02	0.98	Nil	1.40	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1	2.24	0.69	1.74	0.60	Nil	1.26	?	Patna		
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...	...	...	...	...	...	...	...	...	...	...	Nil	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	Nil	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	Nil	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	Nil	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	Nil	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	Nil	?	?	?	?	?	?	Patna			
...	...	...	...	...	...	...	...	...	...	...	1</										



Table of Rainfall recorded at Station

[illegible]





SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS  
TAKEN IN ASSAM, FOR THE MONTH OF MAY 1894.

At the end of April a small storm which may have formed in front of a preliminary advance of monsoon winds had advanced up the Gulf of Martaban and had passed into Burma close to Rangoon. It was, however, practically too far away from Bengal to affect the weather, except perhaps to a slight extent at the eastern stations, which at the close of that month and during the first two or three days of May were receiving rain showers. Practically, however, from the beginning of May ordinary hot-season conditions obtained over Bengal. Both temperature and pressure were in slight to moderate excess for the first week, while weather was fairly settled, and only a few unimportant local storms or nor'westers with rain were reported. On the 7th and 8th of May, however, a brisk to rapid fall of pressure occurred, and a distinct low-pressure area formed over the province, the defect ranging up to 0.188" at Sibsagar on the 8th. Hence unusually strong southerly winds set in at the head of the Bay, bringing up large amounts of moisture to the province, and local storms began to be much more numerous at the eastern and northern stations, and they afterwards extended to the south-west and west of the province. From the 8th to the 10th, however, pressure increased, and the small depression practically filled up. On the 13th and 14th again a brisk fall of pressure occurred, and the low-pressure area reappeared, pressure on the 14th being in defect by 0.16" over a considerable part of Central and Northern Bengal.

On the 15th and 16th the changes of pressure were irregular, and the depression filled up to a small extent, but on the 17th a fall of pressure extended over the whole of Bengal and Assam, and again a very distinct barometric depression existed over these areas, the defects being largest along the foot of the hills and in Central and South Bengal. From the 17th to the 19th the pressure changes were again somewhat irregular, but their tendency was to make the barometric depression rather more pronounced in the northern districts. On the 20th a further rapid fall of pressure occurred, and the depression became still more prominent, the defect ranging up to 0.19" at Sibsagar. On the 21st and 22nd, owing to an increase of pressure, the depression had become of little importance, but from the 24th to the 26th pressure fell briskly, and the depression reappeared in a rather more intense form, the defect ranging up to more than a quarter of an inch on the 26th at such stations as Purnea, Darbhanga and Bankipore. On the 27th of May pressure was falling slowly, but the decrease was largest at the south-western and western stations. The depression over Bengal was still very pronounced on the 27th, and in the centre of the province and over a considerable part of Bihar a defect of more than 0.25" was registered. From the 28th, however, the depression began to fill up, and a rapid increase of pressure was reported, the rise exceeding a tenth of an inch at some of the north-eastern stations, and the seat of largest defect was thus transferred in a south-westerly direction. On the 29th the rapid increase of pressure continued, and over a large part of Bihar and parts of Central Bengal the increase was again larger than a tenth of an inch. A further but not quite so rapid increase occurred on May 30th, but on this day, at the eastern stations in Assam, pressure was beginning to fall. These changes had the effect of driving the low-pressure area again in a south-westerly or southerly direction, and while on the 30th the pressure over the greater part of Bengal had become fairly normal, a distinct low-pressure area had drifted over parts of South-West Bengal and over Orissa. On the 31st the rise of pressure continued over the western and south-western parts of the province, though the falling pressure had extended from Assam over the eastern parts of Bengal, and on the 31st the low-pressure area had drifted down the west coast of the Bay, and probably extended towards the centre of the Bay itself.

It will hence be seen that throughout the greater part of May a very decided barometric depression has existed over Bengal and parts of Assam, the depression generally being most clearly marked and deepest at the northern stations and along the foot of the hills. This distribution of pressure has practically controlled the weather during the whole month. With the depression overlying the northern districts, winds at the south-western and western stations have been generally south-westerly, while at the southern and eastern stations winds have ranged from southerly to easterly; also the winds blowing in the west of the province have been comparatively dry, while the winds at the south-eastern and eastern stations have been loaded with moisture. With this pressure distribution also there was an unusually strong indraught towards the depression, and hence during the greater part of the month, and especially during the period when the depression equalled about a quarter of an inch, strong southerly winds were blowing over the province. With the increasing depth of the depression the force of the winds also increased, so that winds became stronger up till about the 26th, when at the head of the Bay almost a moderate gale of wind was blowing for several days, and wind velocity at Saugor Island from 8 A.M. of the 25th to the 26th registered the high amount of 37 miles an hour. Again, also, in the matter of rainfall and local storms conditions were determined by the existence of the barometric depression. To the east and south-east of the depression weather was unsettled, and numerous rain-storms occurred during a large part of the month, so that the eastern and northern districts of Bengal and the whole of Assam received considerable amounts of rain, and temperature was hence decidedly low. On the other hand, over the area occupied by the depression and to the west and south of it,



weather was generally fine and practically rainless for the greater part of the month, and unusually high temperature was experienced specially towards its close. As an instance it may be mentioned that the temperature reported on the morning of May 28th showed that while at the extreme eastern stations the mean temperature of the previous 24 hours had been in defect by amounts ranging up to  $6.9^{\circ}$  at Sibsaigar: over Bengal generally temperature was in large excess by amounts ranging up to the exceedingly large amount of  $16.2^{\circ}$  at Bankura. On this morning no less than 15 stations reported maximum temperatures of  $110^{\circ}$  and upwards, while at Bankura a temperature of  $117.1^{\circ}$  was reported, which is no less than  $23.3^{\circ}$  above the normal maximum temperature of that day. Hence rainfall was fairly general and rather heavy during a considerable part of the month in Assam, North Bengal and East Bengal, while on the other hand rainfall was light, and only occurred in certain definite periods over the remainder of the province. The first period was from the 8th to the 12th after the depression had in the first instance become well defined, when local storms or nor'westers became fairly general over the province, while the second period of rainfall was apparently connected with the movement of the depression from the north of Bengal and Assam. As the depression began to drift south-westwards and southwards towards the end of the month, as explained previously, the conditions changed with it, a wave of comparatively cool weather with rain-storms began to flow over the province from east to west, reaching as far as South-West Bengal on the 30th and 31st May, while the rainfall reached parts of Bihar about June 1st. Hence the amounts of rain in May have been moderate only in South-West Bengal, and small in Bihar, Orissa and Chota Nagpur.

During May it is usual for two or three strong advances of south-west monsoon winds to take place in the south of the Bay, the indications of which are to be found in the increased wind velocities at the Ceylon stations. In front of such advances also cyclonic storms are frequently if not usually found. In the present year these advances have been conspicuous by their absence, and no strong advance of monsoon winds was registered at all. A slight strengthening of the winds at the Ceylon stations was noticed from about the 1st to the 5th of May, but if this did represent an advance of monsoon winds, it was of a most feeble character. Later on, about the 29th to the 31st, there were indications of the existence of squally, unsettled weather in the centre of the Bay, which may have formed in front of a feeble inrush of moist winds over the Bay, but again if this did represent an advance of the monsoon current, it was also of extremely feeble character. Practically therefore there was no real advance of monsoon winds in the Bay in May.

*Pressure.*—The mean pressure for the month has hence been rather largely below the normal, the defects at the great majority of stations ranging from  $0.05''$  to  $0.07''$ . The defects have been smallest at a few of the southern and south-western stations, where they have equalled from  $0.03''$  to  $0.05''$ .

These defects have been fairly persistent throughout the month. The average pressure for the first few days of the month was nearly normal, but for the week ending May 12th the usual defect ranged from  $0.03''$  to  $0.05''$  and  $0.06''$ , the defects being smallest at the south-eastern stations and largest in parts of Bihar. In the week ending the 19th the defect had increased, and varied from a twentieth of an inch in Chota Nagpur to more than a tenth of an inch at such typical stations as Burdwan, Jessore, Bankipur, Darbhanga and Purnea, while in the week ending May 26th the defect ranged from more than  $0.14''$  at the foot of the hills to  $0.023''$  at False Point and to nearly a normal pressure at Chittagong. Again, towards the close of the month the general pressure of the province became more nearly normal.

In Assam the defect in the mean pressure for the month has averaged more than  $0.06''$  at Dhubri and Sibsaigar and  $0.044''$  at Silchar.

*Temperature.*—As has been explained previously, temperature has been low at the eastern stations and high in the west of Bengal. The variations of the average mean temperature are from a defect of  $1.3^{\circ}$  at Sibsaigar to an excess of  $4^{\circ}$  and  $5^{\circ}$  at such stations as Chaibassa, Bankura, Gaya, Hazaribagh, etc. The general mean temperature of all the stations in Assam has been very nearly normal (an excess of  $0.3^{\circ}$  only), while on the other hand in Chota Nagpur there had been a mean excess of  $4.6^{\circ}$ , and in Bihar one of  $3.6^{\circ}$ . For the whole of Bengal the mean temperature of the month was  $2.7^{\circ}$  in excess of the normal. This excess has been fairly equally distributed in both day and night temperatures in the manner indicated by the above figures, except over parts of West Bengal and the east of Bihar, where the average day, or maximum, temperatures for the month have been about  $5^{\circ}$  to  $6^{\circ}$  higher than usual, the excess having been  $6^{\circ}$  and upwards at Midnapore, Bankura and Naya Dumka.

*Rainfall.*—An average fall of 7.66 inches of rain has been received in North Bengal, and one of 5.94 inches in East Bengal, but even these rather large amounts are less than the usual amount by a quarter to one-sixth the usual falls. South-West Bengal has only received 3.13 inches, or not much more than half the normal fall, while Bihar, Orissa and Chota Nagpur have each received average falls of only about four-fifths of an inch of rain, and these represent only about a third or a quarter of the usual falls.

The actual falls have been heaviest in South-East Bengal, where the districts of Chittagong and South Lushai Hills have received about sixteen and seventeen inches of rain. Another area of heavy precipitation also exists in North Bengal, where average falls of 11



to 14 inches are reported in the Darjeeling and Kuch Bihar districts. On the other hand, no rain at all has fallen in Palamau and 0·01 inch in Puri, while amounts averaging only about a third of an inch and less are reported in Lohardaga, Saran, Shahabad, Patna, and Muzaffarpur.

Notwithstanding the generally defective falls, however, rainfall has been decidedly in excess of the normal in Chittagong, Noakhali, and South Lushai Hills and in slight excess in Pabna, Dacca, and Tippera.

The following table gives full data for comparison of the actual and normal rainfall of the month of May for all districts of the province. The figures are derived from the average and actual rainfall of the rain-reporting stations in each district, due allowance being made for the area which each station represents. This gives a more accurate average than the arithmetical means given in the weekly and monthly tables. The first column gives the normal or average district rainfall as determined from the observations of the past 15 years. The second column gives the actual district rainfall as determined from the weighted actual rainfall of the month at the reporting stations in each district. The third column expresses the ratio of the actual district rainfall of the past month to the normal rainfall as a percentage. The fourth column gives the same information as the third in a slightly different form, stating as a percentage how much the district rainfall of the month varied in excess or defect from the normal.

*Percentage Table for May 1894.*

DIVISION.	DISTRICT.	Normal district rainfall May.	Actual district rainfall for May 1894.	Percentage of actual to normal rainfall.	Percentage excess (+), defect (-).
South-West Bengal	Burdwan	5·01	4·28	85	— 15
	Birbhum	3·40	1·92	56	— 44
	Bankura	4·03	1·41	35	— 65
	Midnapore	5·05	1·13	22	— 78
	Hooghly	5·34	1·63	31	— 69
	Howrah	5·81	2·14	37	— 63
	24-Parganas	5·91	2·10	36	— 64
	Calcutta	5·42	3·00	55	— 45
	Nadia	6·35	5·95	94	— 6
	Murshidabad	5·21	2·34	45	— 55
	Jessore	7·01	6·91	99	— 1
	Khulna	6·61	4·53	69	— 31
North Bengal	Rajshahi	6·09	3·04	50	— 50
	Dinajpur	6·45	3·35	52	— 48
	Jalpaiguri	11·96	7·08	59	— 41
	Darjeeling	8·58	4·33	50	— 50
	Kuch Bihar	13·86	14·82	106	+ 6
	Rangpur	11·24	6·17	55	— 45
	Bogra	7·91	6·03	76	— 24
	Pabna	7·11	8·17	115	+ 15
	Dacca	8·79	8·75	101	+ 1
	Mymensingh	9·94	10·46	105	+ 5
East Bengal	Faridpur	8·80			
	Backergunge	7·80	6·51	83	— 17
	Tippera	10·21	10·83	106	+ 6
	Noakhali	10·05	13·68	136	+ 36
	Chittagong	6·54	16·66	253	+ 153
	South Lushai Hills	10·13	17·11	169	+ 69
	Patna	2·18			
	Gaya	1·74	0·33	79	— 21
Bihar	Shahabad	1·30	0·36	28	— 72
	Saran	1·92	0·15	8	— 92
	Champaran	2·60	1·45	56	— 44
	Muzaffarpur	2·51	0·17	7	— 93
	Darbhanga	2·68	0·58	22	— 78
	Monghyr	2·34	0·93	40	— 60
	Bhagalpur	3·19	0·66	21	— 79
	Purnea	5·50	2·10	38	— 62
	Malda	4·50	1·88	42	— 58
	Sonthal Parganas	3·75	1·43	38	— 62
Orissa	Cuttack	3·95	0·96	24	— 76
	Balasore	4·95			
	Puri	2·76	Nil	0	— 100
Chota Nagpur	Hazaribagh	2·38	0·72	30	— 70
	Lohardaga	2·85	0·39	14	— 86
	Palamau	1·41	Nil	0	— 100
	Manbhum	3·25	1·03	32	— 68
	Singbhum	4·17	0·37	9	— 91

In Assam very heavy falls of rain have occurred during the month, and Silchar has received 22·68 inches, Dhubri 11·94 inches, and Sibsagar 10·90 inches.

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the month of May 1894:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.						
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 16th May 1894.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
South-West Bengal ... ..	117.4	68.2	100.9	79.7	90.3	+3.3	3.13	5.40	-2.27	4.48	7.41	-2.93	0.78	2.64
North Bengal ... ..	105.0	66.3	92.9	74.7	83.8	+1.8	7.66	9.26	-1.60	9.66	10.83	-1.17	0.37	4.23
East Bengal ... ..	99.8	67.4	90.6	75.5	83.1	+0.6	5.94	8.52	-2.58	10.96	9.21	+1.75	6.43	5.27
Bihar ... ..	114.7	68.8	103.3	79.1	91.2	+3.6	0.82	2.79	-1.97	1.57	3.69	-2.12	0.10	1.68
Orissa ... ..	111.3	73.8	95.2	81.3	83.3	+2.5	0.78	3.87	-3.09	1.80	5.70	-3.90	0.65	2.18
Chota Nagpur ... ..	117.8*	69.9*	104.8*	79.9*	92.4*	+4.6*	0.82	2.65	-1.83	1.55	4.18	-2.63	0.02	1.62
Assam ... ..	96.6	68.0	87.0	72.5	79.8	+0.3								

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,

The 11th June 1894

A. PEDLER,

Meteorological Reporter to the Govt. of Bengal.



## Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.	STATION OBSERVATIONS.																
	DIVISION.	DISTRICT.	Representative station.	AIR PRESSURE.			WIND.		TEMPERATURE.								
				Mean barometric height, 8 A.M., reduced to 33".	Mean reduced to sea-level and constant grav. ity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily tem.		
SOUTH-WEST BENGAL.	Burdwan	Burdwan	...	29.531	29.576	+0.012	Sly	137	99.7	4 & 5 June	72.7	5th June	97.4	77.3	85		
		Raniganj	...	29.277	29.557	-0.027	SEly	83	105.2	4th "	72.9	5th "	101.3	77.9	85		
		Birbhum	...														
		Bankura	...	Bankura	...	29.287	29.532	-0.017	SE	182	106.5	4th "	74.6	5th "	102.4	78.5	86
		Midnapore	...	Midnapore	...	29.492	29.586	0	S	233	106.4	3rd "	72.2	5 & 8 "	98.5	76.5	85
	Presidency	Hooghly	...														
		Howrah	...														
		24 Parganas	...	Saugor Island	...	29.629	29.598	+0.029	SSW	480	94.2	5th "	75.5	5 & 8 "	92.0	80.7	86
		Calcutta	...	Calcutta	...	29.625	29.592	+0.025	S & Calm	168	97.1	3rd "	72.2	8th "	94.5	77.9	86
		Nadia	...	Krishnagar	...	29.594	29.589	+0.004	SEly	178	97.2	3 & 5 "	69.2	8th "	95.8	75.3	82
NORTH BENGAL.	Rajshahi	Murshidabad	...	Berhampore	...	29.572	29.587	+0.014	SEly	106	97.2	3rd "	72.3	7th "	94.7	75.6	82
		Jessore	...	Jessore	...	29.619	29.599	+0.015	Variable	101	95.0	4th "	71.9	8th "	93.3	74.7	84
		Khulna	...														
		Rajshahi	...	Rampur Boalia	...	29.564	29.583	+0.002	SE	162	95.1	3rd "	72.6	8th "	92.7	75.9	84
		Dinajpur	...	Dinajpur	...	29.637	29.614	-0.005	E	89	95.1	7th "	73.7	9th "	89.5	75.6	82
	Dacca	Jalpaiguri	...	Jalpaiguri	...	29.402	29.643	+0.003	ESE	101	91.4	4th "	71.6	6th "	87.6	74.4	81
		Darjeeling	...	Darjeeling	...	22.882	—	-0.017	Variable	103	65.0	7th "	54.7	5th "	64.0	55.8	59
		Gnatong	...	?	?	?	?	NW	99	62.8	9th "	38.1	3 & 5 "	53.5	49.6	47	
		Kuch Bihar	...														
		Rangpur	...	Rangpur	...	29.541	29.618	-0.014	SEly	65	90.8	7th "	68.7	4th "	87.3	74.2	81
EAST BENGAL.	Dacca	Bogra	...	Bogra	...	29.590	29.603	+0.001	SEly	59	94.7	6th "	73.7	8 & 9 "	88.8	75.6	82
		Fabna	...	Sirajganj	...	29.610	29.609	-0.015	Calm & SEly	100	92.3	7th "	72.7	8th "	88.9	76.2	82
		Dacca	...	Dacca	...	29.645	29.613	+0.010	SSE	220	91.1	3rd "	73.2	4 & 8 "	88.3	76.9	82
		Mymensingh	...	Mymensingh	...	29.619	29.629	-0.012	ESE	129	90.7	7th "	71.6	8th "	85.6	75.3	80
		Faridpur	...	Faridpur	...	29.633	29.627	0	SEly	111	92.5	7th "	72.4	8th "	89.0	77.0	83
	Chittagong	Backergunge	...	Barisal	...	29.647	29.605	-0.022	Calm, Sly	94	92.3	3rd "	74.9	3, 5, 8 & 9 "	90.0	75.8	82
		Tippera	...	Comilla	...	29.648	29.632	-0.005	E & S	163	90.4	3rd "	71.8	5th "	87.5	74.3	80
		Noakhali	...	Noakhali	...	29.642	29.632	-0.016	SE	191	87.5	3, 4, 9 "	71.8	9th "	86.9	75.4	81
		Chittagong	...	Chittagong	...	29.635	29.609	+0.030	SE & SE	167	88.2	6th "	72.1	8th "	86.3	75.0	80
		South Lushaj Hills	...														
BIHAR.	Patna	Patna	...	Bankipore	...	29.404	29.535	-0.019	E	240	105.0	3rd "	78.7	5th "	101.6	80.4	91
		Gaya	...	Gaya	...	29.168	29.485	-0.048	E	144	109.6	3rd "	83.3	3rd "	108.0	85.2	96
		Shahabad	...	Dehri	...	29.213	29.505	-0.036	Variable	258	111.4	3rd "	83.0	3 & 7 "	107.7	84.4	96
		Shahabad	...	Buxar	...	29.325	29.514	-0.038	E & NEly	212	100.0	5th "	80.2	5th "	103.8	82.3	93
		Arrah	...	Arrah	...	29.376	29.513	-0.037	NE	119	106.4	3 & 8 "	81.0	5th "	102.2	82.6	92
	Bhagalpur	Saran	...	Chapra	...	29.413	29.544	-0.012	ESE	194	105.3	3rd "	79.6	5 & 9 "	100.4	81.1	91
		Champanan	...	Motihari	...	29.387	29.567	-0.014	ENE	207	99.0	3rd "	69.8	6th "	91.9	75.1	83
		Muzaffarpur	...	Muzaffarpur	...	29.439	29.570	—	ENE	228	100.7	3rd "	74.2	6th "	94.6	77.4	86
		Darbhanga	...	Darbhanga	...	29.443	29.561	-0.009	ESE	217	96.0	3 & 4 "	74.2	4th "	92.5	78.0	85
		Monghyr	...														
ORISSA.	Orissa	Bhagalpur	...	Bhagalpur	...	29.450	29.562	-0.007	SE & ENE	90	100.8	3 & 4 "	76.0	5 & 8 "	96.9	78.1	87
		Purnea	...	Purnea	...	29.519	29.598	+0.021	E	166	98.7	5th "	74.2	9th "	92.9	76.8	84
		Malda	...	Malda	...	29.558	29.582	-0.001	SE	89	99.1	6th "	74.5	5 & 6 "	94.5	76.5	86
		Sonthal Parganas	...	Naya Dumka	...	29.115	29.556	-0.015	SEly	184	100.7	4 & 5 "	69.8	6th "	95.9	75.8	85
		Cuttack	...	Cuttack	...	29.550	29.571	+0.009	S	120	105.8	5th "	75.8	9th "	101.8	81.9	91
	Chota Nagpur.	False Point	...	False Point	...	29.631	29.593	+0.045	S	348	91.5	3 & 6 "	76.1	9th "	90.9	82.0	86
		Balasore	...	Balasore	...	29.571	29.572	-0.015	SWly	272	101.5	8th "	76.2	5th "	95.6	80.4	88
		Puri	...	Puri	...	29.619	29.574	—	SW	330	92.2	4th "	75.6	9th "	91.1	82.8	87
		Gopalpur	...	Gopalpur	...	29.618	29.579	—	SSW	405	91.2	3 & 4 "	78.6	3rd "	89.9	81.5	85
		Hazaribagh	...	Hazaribagh	...	27.605	29.499	-0.030	SW	314	105.1	4 & 5 "	75.8	6 & 9 "	103.9	78.3	91
ASSAM.	Chota Nagpur.	Lohardaga	...	Ranchi	...	27.498	29.510	-0.035	SW	206	105.0	4th "	73.9	9th "	101.6	76.8	89
		Palamau	...	Daitongaj	...	28.861	29.325	—	SW	226	114.2	5th "	80.0	9th "	111.7	86.1	98
		Manbhum	...														
		Singbhum	...	Chaibassa	...	28.840	29.533	-0.021	SW	77	107.5	6th "	75.7	6 & 9 "	104.6	80.1	92
CHOTA NAGPUR.	Chota Nagpur.	Sibsagar	...	Sibsagar	...	29.365	29.654	-0.008	NE & Calm	—	91.2	5th "	72.0	3 & 8 "	84.8	74.2	79
		Goalpara	...	Dhubri	...	29.565	29.634	+0.014	Variable	119	89.2	4 & 5 "	74.1	3 & 6 "	85.6	75.1	80
		Cachar	...	Silchar	...	29.613	29.669	+0.018	Calm	—	89.5	3, 4 & 7 "	71.8	7th "	86.3	74.5	80

\* Mean of six days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the years 1871 to 1893. The humidity of the atmosphere is expressed in percentage, saturated air being represented by 100. A clear sky is denoted by 0 and an overcast sky by 10. The mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional stations for the period in question. The stations in the district sending in returns divided by the number of stations. A rainy day is one of which at least a tenth of an inch fell.







## Statement of rainfall in Bengal for the week ending Saturday (8 a.m.), the 9th of June 1894—contd.

Meteorological divi- sion.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain- fall since 16th May 1894.	Average rainfall from 16th May to date.
				Sunday, 3rd.	Monday, 4th.	Tuesday, 5th.	Wednesday, 6th.	Thursday, 7th.	Friday, 8th.	Saturday, 9th.							
EAST BENGAL.	Dacca.	Dacca	Munshiganj ...	...	1'36	...	...	...	0'77	0'84	3	2'97	3'42	3'19	4'16	12'17	8'38
		Dacca	Dacca ...	0'09	...	0'06	0'05	...	2'06	...	...	...	3'01	3'75	...	...	7'67
		Dacca	Narayanganj ...	...	0'28	0'19	0'02	...	0'74	0'43	4	1'66	1'90	1'83	2'27	8'19	5'91
		Dacca	Manikganj ...	...	...	...	...	...	1'31	...	1	1'31	2'27	1'64	3'12	5'49	6'92
		Dacca	Jaydebpur ...	0'20	1'23	...	0'26	0'05	1'62	0'10	5	3'46	...	3'53	...	8'16	?
		Mymensingh	Kishorganj ...	...	0'06	...	...	...	4'97	...	...	...	3'92	...	5'31	...	10'02
		Mymensingh	Atia (Tangail) ...	...	2'04	...	...	...	4'01	...	2	6'05	3'05	6'05	3'81	11'76	7'12
		Mymensingh	Mymensingh ...	0'01	0'24	0'29	...	2'30	5'25	0'65	5	8'74	4'65	9'70	5'83	15'80	11'73
		Mymensingh	Jamalpur ...	0'73	0'45	...	0'75	2'19	3'48	0'75	6	8'35	3'05	8'74	3'94	11'02	8'07
		Mymensingh	Netrakona ...	...	0'34	0'19	...	12'50	0'29	...	4	13'32	4'39	14'28	5'94	31'42	11'96
CHITTAGONG.	Chittagong.	Chittagong	Subarnakhal ...	0'58	0'07	...	...	0'98	4'58	0'69	4	6'90	...	6'90	...	11'86	?
		Chittagong	Durgapur ...	...	...	0'10	...	6'00	1'10	0'33	4	7'50	...	8'30	...	19'15	?
		Chittagong	Sherpur Towan ...	0'06	0'77	...	0'27	6'37	0'63	0'33	5	8'45	...	10'30	...	14'76	?
		Chittagong	Duwaniganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Chittagong	Madaripur ...	0'13	...	0'47	...	0'11	0'47	1'19	5	2'37	3'36	3'63	4'04	5'13	7'98
		Chittagong	Faridpur ...	...	...	...	...	...	1'20	0'41	2	1'61	3'03	1'61	3'85	5'53	8'83
		Chittagong	Gonundo ...	...	0'40	...	...	...	1'60	1'50	3	3'50	2'62	3'50	3'41	6'50	7'04
		Backergunge	Patuakhali ...	0'26	0'08	...	1'16	10'27	1'05	0'07	4	2'89	5'43	2'89	6'33	4'77	10'92
		Backergunge	Pirojpur ...	...	0'65	...	0'15	0'52	0'58	0'46	5	2'36	3'93	3'48	4'47	6'48	7'88
		Backergunge	Barisal ...	0'30	0'70	0'39	0'90	1'74	0'37	0'64	7	4'94	3'57	4'94	4'06	10'11	8'07
CHITTAGONG.	Chittagong.	Chittagong	Gournadi ...	0'58	0'49	...	0'14	...	0'44	0'37	1'09	...	3'71	...	5'39	?	
		Chittagong	Bhola ...	0'08	0'62	0'20	0'50	0'20	0'25	0'20	6	2'35	4'85	2'35	5'69	4'21	9'44
		Chittagong	Daulatkhani ...	1'10	0'90	0'10	1'51	...	0'71	1'73	6	6'05	...	6'13	...	11'55	?
		Chittagong	Bauphal ...	...	0'13	...	...	2'84	0'79	0'29	4	4'05	...	4'05	...	8'07	?
		Hill Tippera	Agartala ...	...	...	0'90	...	...	3'70	0'20	3	4'80	2'56	5'40	3'62	11'75	7'82
		Tippera	Comilla ...	0'35	1'37	0'63	0'80	0'73	1'97	6'46	7	12'31	4'16	15'13	5'07	18'07	9'62
		Tippera	Chandpur ...	0'42	0'22	1'71	0'06	1'01	2'26	...	5	5'68	3'56	5'68	4'38	10'14	7'70
		Tippera	Brahmanbaria ...	...	2'25	0'12	...	...	2'32	...	3	4'69	3'45	4'69	4'30	14'55	8'70
		Tippera	Ramchandrapur ...	...	1'50	...	...	1'80	...	...	...	...	...	...	...	...	?
		Tippera	Nasirnagar ...	...	1'75	0'25	0'10	...	...	...	...	...	...	...	...	...	?
CHITTAGONG.	Chittagong.	Chittagong	Daudkandi ...	...	0'32	0'40	...	0'90	0'42	...	4	2'04	...	2'04	...	7'64	?
		Chittagong	Kasba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Chittagong	Laksam ...	...	0'60	1'30	1'09	0'53	0'15	0'88	6	4'55	...	4'55	...	7'63	?
		Noakhali	Noakhali ...	0'10	0'06	0'14	2'58	0'08	0'66	...	5	6'29	5'68	6'30	6'78	11'06	11'53
		Noakhali	Fenny ...	0'35	0'61	0'15	0'17	0'15	1'25	2'67	...	...	...	...	...	...	12'71
		Noakhali	Harishpur ...	0'41	0'72	1'03	0'04	0'03	...	...	...	...	...	...	...	...	?
		Noakhali	Ramganj ...	0'08	...	...	0'21	0'17	0'79	1'23	4	3'18	...	3'18	...	8'66	?
		Chittagong	Cox's Bazar ...	0'03	...	0'90	0'40	...	...	0'10	3	1'43	6'64	0'46	7'75	15'51	13'14
		Chittagong	Chittagong ...	0'05	2'12	0'05	...	0'07	1'24	1'07	3	4'60	5'78	Nil	6'79	18'19	17'33
		Chittagong	Kutubdia ...	0'14	0'50	0'40	...	...	...	...	...	...	...	...	...	...	?
CHITTAGONG.	Chittagong.	Chittagong	Satkania ...	0'18	0'43	0'32	...	...	2'13	...	...	...	...	...	...	...	?
		Chittagong	Kodala ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Chittagong	Fenosa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Chittagong	Mirsarai ...	0'14	1'33	0'07	0'13	...	2'88	0'47	5	5'02	...	5'86	...	11'01	?
		Chittagong	Chandpur ...	...	...	0'22	...	...	...	...	...	...	...	...	...	...	?
		South Lushai Hills.	Rangamatia ...	...	6'97	0'11	0'34	0'12	1'04	0'86	6	9'43	4'40	9'70	5'34	21'59	0'72
		South Lushai Hills.	Bundarban ...	...	2'11	0'81	...	0'81	0'20	1'08	5	5'01	...	5'34	...	15'85	?
		Patna	Patna ...	...	...	...	...	...	...	...	Nil	Nil	0'52	Nil	0'59	Nil	2'09
		Patna	Dinapore ...	...	...	...	...	...	...	...	Nil	Nil	0'25	0'02	0'31	...	1'47
		Patna	Bihar ...	...	...	...	...	...	...	...	Nil	Nil	0'27	0'06	0'47	...	1'88
CHITTAGONG.	Chittagong.	Chittagong	Barh ...	...	...	...	...	...	...	...	...	...	0'39	...	0'52	...	1'86
		Chittagong	Bikram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Chittagong	Hilsa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Gaya	Aurangabad ...	...	...	...	...	...	...	...	Nil	Nil	0'39	Nil	0'40	Nil	1'79
		Gaya	Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0'31	Nil	0'40	Nil	1'77
		Gaya	Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0'37	0'23	0'49	0'23	1'93
		Gaya	Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0'27	0'09	0'49	0'09	1'80
		Gaya	Arwal ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Gaya	Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Gaya	Sherghati ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
CHITTAGONG.	Chittagong.	Chittagong	Rajauli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Chittagong	Pakri Barawan ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	0'24	?
		Shahabad	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0'24	Nil	0'27	Nil	0'90
		Shahabad	Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0'10	Nil	0'12	Nil	1'28
		Shahabad	Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0'21	Nil	0'33	Nil	0'94
		Shahabad	Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0'17	Nil	0'28	Nil	0'95
		Shahabad	Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0'41	Nil	0'48	Nil	1'61
		Shahabad	Mohanea ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Shahabad	Khiri ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Shahabad	Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
CHITTAGONG.	Chittagong.	Chittagong	Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Chittagong	Koath ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Chittagong	Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Chittagong	Bassouan ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Chittagong	Monaharpur ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Saran	Gopalganj ...	...	...	0'50	...	...	...	...	1	0'50	1'06	0'50	1'12	0'80	2'33
		Saran	Siwan ...	...	...	...	...	...	...	3'54	1	3'54	0'72	3'54	0'79	...	1'91
		Saran	Ekma ...	...	...	...	...	...	...	...	Nil	Nil	...	Nil	...	...	?
		Saran	Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0'36	0'06	0'51	0'06	1'45
		Saran	Seereepur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
CHITTAGONG.	Chittagong.	Chittagong	Annour ...	...	...	...	...	...	...	...	Nil	Nil	...	...	...	...	?
		Chittagong	Basantpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Champan...	Motihari ...	...	...	...	1'12	0'37	...	0'22	3	1'71	0'76	2'10	1'15	2'83	2'59
		Champan...	Bettiah ...	...	...	...	1'48	0'03	0'23	...	2	1'74	0'96	2'26	1'23	2'86	2'47
		Champan...	Bagaha ...	...	...	...	2'84	...	...	...	...	...	...	...	...	...	?
		Champan...	Burhura ...	...	...	0'10	0'42	0'13	...	...	3	0'65	...	0'76	...	0'76	?
		Muzaffarpur	Sitamarhi ...	...	1'12	...	0'35	...	...	0'08	2	1'55	0'83	1'91	0'98	1'91	2'34
		Muzaffarpur	Muzaffarpur ...	...	...	...	...	...	0'03	0'05							
		Muzaffarpur	Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0'37	Nil	0'42	Nil	1'68
		Muzaffarpur	Paru ...	...	...	...	0'24	...	...	...	...	...	...	...	...	...	?
CHITTAGONG.	Chittagong.	Chittagong	Mahuva ...	...	...	...	...	...	...	...	...	...	...	...	...	...	?
		Chittagong	Shuhar ...	...	0'05	...	0'20	...	...	...	...	...	...	...	...	...	?
		Chittagong															



Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 9th of June 1894—*conold.*

Meteorological divi- sion.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain fall since 16th May 1894.	Average rainfall from 16th May to date.		
				Sunday, 3rd.	Monday, 4th.	Tuesday, 5th.	Wednesday, 6th.	Thursday, 7th.	Friday, 8th.	Saturday, 9th.									
BIHAR—concluded.	Bhagalpur—concluded.	Bhagalpur ...	Madhipura ...	...	...	...	...	0.30	0.08	0.27	2	0.65	0.77	1.14	0.93	1.14	3.24		
			Bangson (Sy- fabad.)	...	...	...	...	...	...	0.32	1	0.32	?	0.32	?	0.32	?		
			Supaul	...	...	...	...	...	0.13	0.17	2	0.30	0.65	1.55	0.98	1.55	3.22		
			Pratapganj...	...	...	1.03	...	...	2.10	...	1	0.17	?	?	?	?	3.22		
			Bhagalpur	...	...	...	...	...	0.17	...	Nil	0.17	1.01	0.18	1.03	0.18	2.02		
			Banka	...	...	...	...	...	...	...	1	Nil	1.01	Nil	1.15	Nil	2.90		
			Colgong	...	...	...	0.38	...	...	0.01	1	0.39	?	0.39	?	0.39	?		
			Purnea ...	Kishanganj...	...	0.08	2.00	...	1.49	0.52	3	4.08	2.17	4.90	2.58	4.90	?		
				Araria	...	...	1.50	...	0.03	0.45	2	2.05	1.05	2.35	1.43	?	4.78		
				Purnea	...	0.11	...	...	...	0.29	3	0.96	1.58	2.06	1.74	2.06	4.67		
ORISSA.	Orissa.		Gondwara (Korah).	...	...	...	...	...	0.66	0.15	2	0.81	?	1.31	?	1.51	?		
			Barsac	...	...	...	...	0.42	0.71	...	?	?	?	?	?	?	?		
			Forbesganj	...	...	1.26	...	...	0.35	...	?	?	?	?	?	2.85	?		
			Kaliaganj	...	0.50	...	...	...	4.12	...	0.14	3	4.76	?	5.51	?	6.24	?	
			Malda ...	Malda	...	...	0.24	2.26	...	0.63	0.12	4	3.25	1.80	3.29	2.04	3.49	4.49	
				Chanchal	...	...	...	...	0.09	...	0.40	1	0.49	1.66	0.81	1.86	0.81	4.88	
			Gajol	...	...	...	...	...	...	...	1	0.30	?	0.42	?	0.94	?		
			Sibganj	...	...	...	0.57	0.53	0.55	0.36	0.07	4	1.88	?	1.88	?	2.13	?	
			Sonthal Par- ganas.	Rajmahal	...	...	0.80	0.24	0.18	0.47	0.08	4	1.77	1.20	1.83	1.49	1.92	4.27	
				Godda	...	...	...	...	...	0.07	...	Nil	0.97	0.89	0.07	1.02	0.07	3.31	
CHOTA NAGPUR.	Chota Nagpur.		Pakaur	...	...	...	0.15	0.21	1.59	0.06	3	2.01	1.76	2.01	2.07	4.20	5.07		
			Naya Dumka	...	...	0.46	1.56	0.65	...	...	3	2.67	1.43	3.05	1.58	3.05	3.69		
			Deoghur	...	...	0.21	0.92	0.23	0.14	0.14	2	1.49	1.05	1.95	1.16	1.95	2.01		
			Jamtara	...	...	0.04	0.91	...	...	1.72	2	2.67	1.16	3.18	1.44	3.18	3.39		
			Belbadda	...	...	...	...	0.75	...	...	1	0.75	?	0.75	?	?	?		
			Nanihat	...	...	...	...	0.73	...	...	...	?	?	?	?	?	?		
			Assenboni	...	...	1.30	0.70	1.70	...	...	...	?	?	?	?	?	?		
			Katikund	0.60	...	0.55	0.65	0.33	...	...	4	2.13	?	2.13	?	?	?		
			Madhupur	...	...	...	0.20	0.90	...	0.30	3	1.40	?	1.56	?	2.13	?		
			Sarwan	...	...	...	1.10	0.40	0.80	...	3	2.30	?	2.30	?	2.41	?		
CHOTA NAGPUR.	Chota Nagpur.		Sarath	...	...	0.60	0.19	...	0.36	0.34	4	1.49	?	1.49	?	1.55	?		
			Barkope	...	...	...	...	0.05	0.12	...	1	0.17	?	0.17	?	0.17	?		
			Danrey	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
			Bhagya	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
			Mohespore	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
			Barharua	0.14	...	...	0.03	...	0.20	0.03	2	0.40	?	?	?	?	?		
			Sahibganj	...	...	...	0.05	...	...	0.10	1	0.15	?	0.15	?	0.15	?		
			Cuttack ...	Jagatsingpur	...	...	...	0.78	...	...	...	...	0.46	0.68	0.62	1.18	?	2.03	
				Banki	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
				Cuttack	...	...	...	...	...	...	0.11	1	0.11	1.27	1.16	1.61	1.30	2.77	
CHOTA NAGPUR.	Chota Nagpur.		False Point	...	...	...	...	...	...	0.28	1	0.28	0.90	0.96	1.01	1.30	4.44		
			Kendrapara...	...	...	0.02	0.02	...	...	...	1	1.86	1.28	2.24	1.62	2.27	0.66	3.51	
			Jajpur	...	...	0.21	...	...	...	...	1	1.21	1.60	1.64	1.92	2.27	2.65	4.43	
			Dharmasala	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
			Salipore	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
			Pal Lahara	...	...	...	...	...	...	...	...	?	?	?	?	?	?	?	
			Balasore ...	Akhyapada	...	...	...	...	...	...	2.50	Nil	Nil	?	1.36	?	2.60	?	
				Chandbali	...	...	...	...	...	...	...	1	2.50	0.95	3.20	?	1.96	?	
				Bhadrak	...	...	...	...	...	...	...	Nil	Nil	1.13	0.85	1.85	1.79	3.81	
				Soro	...	...	...	...	...	...	...	Nil	Nil	1.11	0.10	1.31	4.03		
CHOTA NAGPUR.	Chota Nagpur.		Balasore	...	...	0.08	...	...	...	0.14	1	0.22	1.12	0.22	1.45	0.69	4.33		
			Jellasore	...	...	...	...	...	...	...	...	?	1.58	1.08	1.98	4.09	?		
			Baripada	...	...	...	...	0.80	1.30	...	2	2.10	1.83	2.20	2.26	2.30	3.68		
			Puri ...	Puri	...	...	...	...	...	...	0.42	1	0.42	0.98	0.49	1.07	0.49	4.33	
				Khurda	...	...	...	...	...	...	...	...	1.00	1.26	1.26	2.53	?		
				Bhanpur	...	...	...	...	...	...	...	...	1.45	1.66	1.66	3.36	?		
				Gop	...	...	...	...	...	...	...	...	?	?	?	2.39	?		
				Satpara	...	...	...	...	...	...	...	...	?	?	?	?	?		
				Pipli	...	...	...	...	...	...	...	...	?	?	?	?	?		
				Nayagarh	...	...	0.65	...	...	...	...	...	?	?	?	?	?		
CHOTA NAGPUR.	Chota Nagpur.		Ranpur	...	...	...	...	...	...	...	...	?	?	?	?	?			
			Kurma a	...	...	...	...	0.50	...	...	...	?	?	?	?	?			
			Hazaribagh...	Pachamba (Girdih).	...	...	0.88	...	0.18	0.11	0.60	4	1.77	1.08	2.44	1.35	2.44	2.85	
				Hazaribagh...	...	...	...	0.08	...	0.10	0.06	1	0.24	0.92	0.29	1.06	0.27	2.50	
				Semtagurh...	...	...	...	...	...	...	...	...	0.87	0.91	0.99	1.07	2.50	?	
				Mahudi Hills	...	...	...	...	...	...	...	...	...	0.84	?	0.93	2.52	?	
				Jhuma Hill	...	...	...	...	...	...	...	...	...	?	?	?	2.48	?	
				Barhi	...	...	...	...	...	...	...	...	?	?	?	?	?		
				Chatra	...	...	...	...	...	...	...	...	?	?	?	?	?		
				Karagdeha	...	0.15	0.37	...	...	...	0.08	Nil	Nil	?	0.24	?	0.24	?	
CHOTA NAGPUR.	Chota Nagpur.		Rangar	...	...	0.50	0.30	...	...	...	...	?	?	?	?	?			
			Lohardaga ...	Lohardaga	...	...	...	...	...	0.18	0.26	2	0.44	0.41	0.44	0.51	0.44	?	
				Ranchi	...	...	...	...	...	0.14	0.07	1	0.21	1.38	0.47	1.46	0.51	2.25	
				Silli	...	...	0.30	...	0.60	...	...	...	?	?	?	?	3.40		
				Palkot	...	...	...	...	...	...	...	...	?	?	?	?	?		
				Tunar	...	...	...	0.98	...	0.46	0.10	3	1.54	?	1.84	?	1.84	?	
				Chainpur	...	...	...	...	0.93	...	...	...	?	?	?	?	?		
				Palamau ...	Palamau (Daltonganj).	...	...	...	...	...	...	0.21	1	0.21	0.55	0.21	0.67	0.21	1.76
				Bolunath	...	...	...	0.30	...	...	...	...	1	0.30	?	0.37	?	?	
				Husainabad	...	...	...	...	...	...	...	1	0.20	?	0.20	?	?	?	
CHOTA NAGPUR.	Chota Nagpur.		Garhwa	...	...	...	...	...	...	0.15	1	0.15	?	0.15	?	0.20	?		
			Manbhum ...	Purnulia	...	...	...	0.05	1.15	1.16	2	2.36	1.17	2.36	1.38	2.34	3.23		
				Gobindpur	...	2.00	0.12	...	...	0.06	2	2.18	1.33	2.18	1.54	2.33	2.67		
				Raghunath- pur.	...	...	0.45	...	1.10	...	3	2.10	?	2.10	?	2.10	?		
				Barabhum	...	...	0.75	1.55	...	0.12	0.15	4	2.57	?	2.57	?	2.57	?	
				Jhoda	...	...	0.08	0.97	...	0.65	...	2	1.70	?	1.95	?	1.95	?	
				Chas	...	...	0.38	0.10	0.09	0.85	0.24	4	1.66	?	1.70	?	1.70	?	
				Pandra	...	...	0.86	2.19	...	0.06	0.04	2	3.15	?	3.43	?	?	?	
				Singhbhum...	Chaibassa	0.10	...	...	0.99	0.30	0.04	0.45	4	1.88	1.11	2.78	1.33	2.75	3.76
				Chakradhar- pur.	...	...	...	...	...	0.40	0.05	1	0.45	?	0.75	?	?	?	
CHOTA NAGPUR.	Chota Nagpur.		Ghatsila	...	0.20	0.30	...	...	0.60	0.32	?	?	?	?	?	?	?		
			Baharagura	...	...	...	...	...	...	...	4	1.42	?	?	?	?	?		
			Gaukura	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
			Kalkapur	...	...	0.42	0.16	...	...	...	...	?	?	?	?	?	?		
			Monahorpur	...	...	...	...	...	...	0.18	3	0.76	?	0.76	?	0.76	?		
			Kharasau	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
					...	...	...	...	...	...	...	?	?	?	?	?	?		
					...	...	...	...	...	...	...	?	?	?	?	?	?		
					...	...	...	...	...	...	...	?	?	?	?	?	?		
					...	...	...	...	...	...	...	?	?	?	?	?	?		

*Explanation.*—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0.10 inch of rain has fallen.

CALCUTTA, the 12th June 1894.

**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING 8 A.M., SATUR-  
DAY, THE 9TH OF JUNE 1894.**

At the close of the previous week pressure, which had been low in the south-western districts and at one time over the Bay itself, became more normal, and the lowest pressure was again reported from the north-western stations. On the 3rd of June the pressure changes were a little variable, though usually the barometer was falling, and pressure became generally in defect by amounts ranging up to 0.08" in the west of Bihar. The changes of pressure on the 4th were unimportant, and the previous pressure distribution remained unchanged. During this period rain was being received at the eastern and northern stations, but weather was fine generally elsewhere. On the 5th pressure had fallen at a few stations in Bihar and East Bengal, and had risen elsewhere, the increase being largest at the central and south-western stations. A very distinct low-pressure area existed over the west of Bihar on this day, while elsewhere pressure was nearly normal, and with this distribution the local storms and rain which had been previously confined to the eastern half of the province extended in a westerly direction, and on the morning of the 5th showers were reported from most stations in South-West Bengal in addition to East and North Bengal and Assam. On the 6th the pressure changes were small, but the distribution of pressure was irregular, and again local storms with rain occurred in the western and south-western districts. On the 7th pressure fell briskly over the whole province, the fall usually exceeding a twentieth of an inch, and pressure again became in defect by amounts ranging up to 0.06" at the northern stations. Winds therefore became rather more westerly at the western stations, and the winds blowing from the Bay of Bengal rather strengthened. Conditions, however, remained disturbed, and there were numerous rain showers in all districts. On the 8th a rather large increase of pressure occurred in the north-eastern districts of Bengal, while a small rise only occurred at the south-western stations, and again conditions remained disturbed with numerous rain showers. Finally, on the 9th pressure had fallen in Assam and risen over Bengal, the increase equalling 0.07" to 0.08" at the western stations. Conditions continued disturbed, and fairly general rain fell at the eastern and northern stations, while a few local showers were reported in all other districts. Hence during practically the whole week conditions have been favourable for moderate to rather heavy rain in the eastern and north-eastern districts, while very numerous showers have occurred in all other districts.

Feeble monsoon winds due to the Arabian Sea current made their appearance on the Malabar coast on the 4th and 5th of June, and have slowly advanced northward along the Bombay coast during the week, and have also penetrated partly into the interior. This advance on the whole appears to have been decidedly weaker than usual. In the extreme south of the Bay the first rather strong advance of monsoon winds due to the Bay current occurred on the 1st of June, on which date winds became strong and light to moderate rain fell at the Ceylon stations. This branch of the monsoon current has continued to blow with moderate strength only at the Ceylon stations and at the stations on the South Coromandal Coast throughout the week. Again, on the whole the strength of the winds appears to have been rather smaller than usual. Towards the end of the week this current appeared to be creeping up the east and centre of the Bay, and had probably reached Burma. Quite at the close of the week probably it was approaching the north of the Bay. It had not apparently passed over the south-eastern portions of Bengal to any appreciable extent, and the rainfall occurring in the central and western parts of Bengal up to the close of the week was practically confined to local showers, though these were decidedly numerous, and the general and heavy rain accompanying the first burst of the monsoon had not occurred.

*Pressure.*—The average pressure for the week has shown considerable and decidedly irregular variations from the normal, pointing to the decidedly disturbed conditions which have existed. Thus over parts of South-West Bengal pressure has been below the normal, and over another part it has been in excess; also the amount of variation at neighbouring stations has been very unequal. On the whole more stations show defective than excessive pressure, and the largest defects are shown in Bihar and Chota Nagpur. The extreme variations are from a defect of 0.048" at Gaya to an excess of 0.030" at Chittagong.

*Temperature.*—The mean temperature for the week has been nearly 2° in defect in East Bengal and Assam; in South-West and North Bengal temperature has been nearly normal, though slightly in defect, but in Bihar and Orissa an excess temperature of from one to one and-a-half degrees is recorded; Chota Nagpur has also shown a larger excess, and over this area temperature has been 3.3° higher than usual.

*Rainfall.*—East Bengal has received an average fall of 4.90 inches of rain during the week, or about a sixth larger than usual. North Bengal has received 3.91 inches, or about a seventh larger than the normal, while in South-West Bengal the fall has been 2.18 inches or about the normal amount. Chota Nagpur has received 1.16 inches, or nearly a fourth larger than usual, but in the case of Bihar the falls have been again almost normal, though Bihar has received only 0.83 inch. The only Division in which a defective fall is reported is Orissa, which has received only 0.77 inch, which is less than half the normal fall.

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the week ending Saturday, the 9th of June 1894:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1894.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
South-West Bengal	106.5	69.2	96.7	77.2	86.9	—0.2	2.18	2.08	+0.10	3.20	2.32	+0.88	2.37	2.52	3.17	5.23
North Bengal	95.1	68.7	89.2	75.3	82.3	—0.3	3.91	3.40	+0.51	3.74	2.86	+0.88	4.31	4.28	7.20	9.59
East Bengal	92.5	71.6	87.7	75.7	81.7	—1.9	4.90	3.96	+0.94	4.04	3.26	+0.78	5.32	4.87	11.75	9.21
Bihar	111.4	69.8	98.7	79.6	89.1	+1.3	0.83	0.77	+0.06	1.17	1.09	+0.08	1.05	0.94	1.14	2.62
Orissa	105.3	75.6	93.9	81.7	87.8	+1.2	0.77	1.16	—0.39	0.91	1.48	—0.57	1.24	1.40	1.87	3.63
Chota Nagpur	107.5*	73.9*	103.4*	78.4*	90.9*	+3.3*	1.16	0.96	+0.20	2.13	1.71	+0.42	1.39	1.12	1.41	2.72
Assam	91.2	71.8	85.6	74.6	80.1	—1.7										

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 12th June 1894.

A. PEDLER,  
Meteorological Reporter to the Govt. of Bengal.



## Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of May 1894.

		Inches.	Date.
The mean pressure at 10 A.M. during the month	...	29.669	
The mean temperature at 10 A.M. during the month	...	91.8	
The highest temperature during the month	...	105.0	17th
The lowest temperature during the month	...	71.3	11th
The absolute range of temperature during the month	...	33.7	
The mean daily range of temperature during the month	...	17.8	
The greatest range of temperature in one day during the month	...	23.4	17th
The mean 10 A.M. humidity during the month	...	67	
The mean 10 A.M. vapour tension during the month	...	.997	
The total rainfall of the month	...	3.08	
The greatest fall in 24 hours	...	1.27	11th
The number of rainy days in the month	...	4	

J. H. GILLILAND,

*For Meteorological Reporter to the Govt. of India.*

METEOROLOGICAL OFFICE, INDIA,

*The 11th June 1894.*

## Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 3rd to 9th June 1894.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1894.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
June	3rd	29.562	88.7	97.5	17.7	79.8	93.4	84.3	1.055	80.9	67	Nil
"	4th	.627	89.5	97.5	16.1	81.4	93.6	83.5	1.011	79.6	64	
"	5th	.635	85.9	96.0	20.2	75.8	88.6	82.5	1.030	80.1	77	0.22
"	6th	.644	85.9	96.5	21.2	75.3	91.6	84.5	1.090	81.9	74	0.05
"	7th	.617	88.4	95.0	13.2	81.8	92.6	82.5	.975	78.5	64	
"	8th	.644	82.2	91.5	18.7	72.8	84.6	78.5	.894	75.8	75	0.60
"	9th	.696	86.2	94.0	15.7	78.3	91.0	81.5	.948	77.6	65	

The mean 10 A.M. pressure of the seven days	...	...	Inches.
			29.632
The mean temperature of the seven days	...	...	86.7
The extreme variation of temperature	...	...	24.7
The maximum temperature	...	...	97.5
The mean 10 A.M. relative humidity of the seven days	...	...	69
The total fall of rain from 3rd to 9th June 1894...	...	...	Inches.
			0.87
The daily mean temperatures are the crude means of maximum and minimum temperatures.			

J. H. GILLILAND,

*For Meteorological Reporter to the Govt. of India.*

METEOROLOGICAL OFFICE, INDIA,

*The 11th June 1894.*

**Results of the Meteorological Observations taken at the Alipore Observatory from  
3rd to 9th June 1894.**

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 52° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
1894.		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
June	3rd	156.6	10.2	29.533	88.7	96.6	16.5	80.1	81.4	0.976	78.5	73	SSE, SSW and SW	173	Nil	Partially cloudy.
"	4th	155.8	8.5	.579	88.0	96.6	15.0	81.6	81.1	.971	78.3	74	S, SSE and variable	179	0.17	Partially cloudy, o, g, d, p, lr.
"	5th	152.5	7.1	.583	85.9	94.5	18.9	75.6	80.1	.953	77.8	78	SSW	143	0.04	Partially cloudy, d, lr, o.
"	6th	150.5	6.8	.574	86.4	94.4	19.4	75.0	80.2	.953	77.8	76	SSW, SW and SSW.	213	0.04	Partially cloudy, o, d. lr.
"	7th	149.7	6.8	.577	85.9	93.6	11.2	82.4	80.1	.952	77.7	78	SSW, SW and variable.	261	0.63	Partially cloudy, o, g, d, p, t, <.
"	8th	143.9	1.6	.602	83.3	88.5	16.1	72.4	78.5	.910	76.4	80	SW	128	0.02	Partially cloudy, o, g, d.
"	9th	145.8	4.1	.641	86.2	92.1	14.0	78.1	79.7	.927	76.9	74	SW by S and calm	62	Nil	Chiefly cloudy, o.

The mean pressure of the seven days	...	...	...	Inches.
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	...	...	...	29.584
The total number of hours of bright sunshine	...	...	...	Hours.
The maximum possible number of hours of sunshine	...	...	...	45.1
				93.9
				°
The mean temperature of the seven days	...	...	...	86.3
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	...	...	...	86.1
The extreme variation of temperature	...	...	...	24.2
The maximum temperature	...	...	...	96.6
				Miles.
The highest velocity of the wind in one hour	...	...	...	21
				%
The mean relative humidity	...	...	...	76
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	...	...	...	78
				Inches.
The total fall of rain from 3rd to 9th June 1894	...	...	...	0.90
The average fall of the corresponding period for 24 years, Surveyor-General's Office	...	...	...	2.35
The total fall from 1st January to 9th June 1894	...	...	...	9.26
The average fall of the corresponding period for 24 years, Surveyor-General's Office	...	...	...	12.34

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h., 10h., 16h. and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; t, thunder; <, lightning; lr, lightning reflection; p, passing temporary showers.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;  
Calcutta, the 11th June 1894.

J. H. GILLILAND,  
For Meteorological Reporter to the Govt. of India.



DIVISIONS.	DISTRICTS.	BIRTHS.										DEATHS.										REMARKS.																																																																													
		Population under registration.					Ratio per 1,000 of population.					CHOLERA.					SMALL-POX.						FEVER.					DYSENTERY AND DIARRHŒA.					INJURY.					OTHER CAUSES.					TOTAL OF ALL CAUSES.					AVERAGE OF CORRESPONDING MONTHS OF PREVIOUS FIVE YEARS.																																																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97
Burdwan	Burdwan	1,391,880	5,553	30.60	536	4.56	6	0.4	3,707	31.92	65	4.8	12	0.9	841	7.20	5,167	44.52	3,484	30.00	Return not received up to date.																																																																														
Burdwan	Birbhum	797,883	2,283	35.56	266	3.96	28	0.2	2,002	25.00	12	1.2	16	0.9	547	8.16	2,915	42.72	2,168	32.52																																																																															
Burdwan	Bakura	1,060,688	3,002	34.68	97	1.08	6	0.6	2,940	25.20	25	0.2	15	1.2	501	5.52	3,202	32.64	2,079	32.98																																																																															
Burdwan	Midnapore	1,076,710	2,203	27.84	165	1.80	9	1.2	2,433	27.00	142	1.56	35	3.6	421	4.68	3,202	32.64	2,506	27.84																																																																															
Burdwan	Hooahly	721,211	1,073	27.72	277	4.56	9	1.2	832	14.64	189	3.12	31	4.8	280	4.80	1,677	27.84	1,368	22.56																																																																															
Presidency	24 Parganas	881,560	875	15.56	315	5.52	96	1.68	791	13.92	196	3.36	33	4.8	593	10.44	2,024	35.52	1,651	29.04																																																																															
Presidency	Calcutta	1,644,108	5,757	42.00	1,211	8.76	5	0.5	5,961	45.44	23	1.2	43	3.6	406	3.60	7,768	56.64	4,769	34.32																																																																															
Presidency	Murshidabad	1,350,946	4,189	39.96	684	6.48	...	...	3,780	35.24	31	0.2	43	3.6	370	3.60	4,908	47.04	3,680	34.52																																																																															
Bajshahi	Khulna	1,177,632	3,007	30.60	774	7.80	1	0.09	2,171	22.08	16	1.2	51	4.8	440	4.56	3,462	35.16	2,335	23.88																																																																															
Bajshahi	Rajshahi	1,216,838	4,028	40.24	1,416	13.56	60	0.8	4,710	45.08	4	0.5	49	3.6	240	2.16	6,003	59.40	3,888	34.92																																																																															
Bajshahi	Dinapur	1,350,835	6,877	50.64	416	3.12	14	0.8	5,066	45.99	7	0.4	35	2.4	207	2.88	6,475	59.40	4,549	35.04																																																																															
Bajshahi	Jalgaon	931,332	2,376	41.76	80	1.32	1	0.1	2,614	45.96	55	0.6	10	1.2	136	2.88	2,806	51.00	2,001	45.72																																																																															
Bajshahi	Darjeeling	925,314	493	26.40	...	...	...	...	632	34.92	107	5.64	6	2.4	148	7.68	908	48.72	623	33.36																																																																															
Bajshahi	Rangpur	2,627,404	6,890	39.60	135	4.48	2	0.1	5,832	35.84	7	0.5	28	1.2	379	2.16	6,347	56.84	6,788	39.24																																																																															
Bajshahi	Bogra	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Bajshahi	Pahna	1,409,655	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Dacca	Mymensingh	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Dacca	Faridpur	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Dacca	Backergunge	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Dacca	Tippura	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
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Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
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Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60	0.8	1,568	22.92	8	1.0	41	6.0	227	3.24	2,037	29.88	1,786	26.16																																																																															
Chittagong	Chittagong	1,393,392	4,238	35.60	135	1.92	60</																																																																																												



## Vital Statistics of Towns in Bengal with a population of 20,000 and over during the month of April 1894.

DISTRICTS.	TOWNS.	Population under registra- tion.	BIRTHS.		DEATHS.										REMARKS.									
			Number re- gistered.	Ratio per 1,000 of population per annum.	CHOLERA.		SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		INJURY.			OTHER CAUSES.		TOTAL OF ALL CAUSES.		Ratio per 1,000 of population per annum.	Number regis- tered.	Ratio per 1,000 of population per annum.	Number regis- tered.	Ratio per 1,000 of population per annum.
					Number regis- tered.	Ratio per 1,000 of population per annum.	Number regis- tered.	Ratio per 1,000 of population per annum.	Number regis- tered.	Ratio per 1,000 of population per annum.	Number regis- tered.	Ratio per 1,000 of population per annum.	Number regis- tered.	Ratio per 1,000 of population per annum.		Number regis- tered.	Ratio per 1,000 of population per annum.	Number regis- tered.	Ratio per 1,000 of population per annum.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
Burdwan	Burdwan	34,477	47	16.32	16	5.52	...	...	...	98.44	13	4.08	2	.60	16	5.52	128	44.52	90	34.44	Return not received up to date.			
Midnapore	Midnapore	33,060	88	28.92	33	11.88	1	.36	...	92.44	9	.72	1	.36	11	3.96	110	39.84	108	39.12				
Hoochly	Hoochly and Chinsura	35,952	50	16.68	6	1.92	...	...	...	13.68	17	5.64	...	...	14	4.56	78	25.92	93	30.96				
Howrah	Howrah	110,606	146	15.00	74	7.56	3	.24	...	6.12	35	3.60	10	.96	42	4.32	224	23.04	188	19.32				
24-Parganas	24-Parganas																							
Calcutta	Calcutta	681,560	875	15.56	315	5.52	96	1.68	...	13.92	196	3.56	33	.48	203	10.44	2,024	55.52	1,651	29.04				
Nadia	Nadia	25,500	62	29.16	41	1.66	...	.36	...	54.96	...	...	...	...	9	4.20	109	79.44	37	17.40				
Murshidabad	Murshidabad	32,576	44	14.76	26	8.76	1	...	...	34.68	...	...	...	...	4	7.32	141	47.52	118	39.72				
Rajshahi	Rajshahi	25,515	32	16.32	14	7.08	...	...	...	24.68	...	...	...	...	8	4.08	75	38.16	80	40.80				
Barisal	Barisal	21,407	55	20.72	32	17.88	...	...	...	38.04	...	...	...	...	6	5.12	106	59.40	62	34.68				
Chittagong	Chittagong	23,267	48	24.72	...	...	...	...	...	14.88	...	...	...	...	...	...	35	18.00	34	17.52				
Dacca	Dacca	88,321	119	17.28	6	3.48	...	...	...	7.92	...	...	...	...	...	...	128	18.60	178	25.92				
Patna	Patna	24,969	27	15.44	7	1.80	...	.07	...	14.88	...	...	...	...	...	...	44	21.84	44	21.84				
Gaya	Gaya	44,419	98	26.40	24	6.48	...	...	...	20.52	...	...	...	...	...	...	107	37.92	306	29.20				
Shahabad	Shahabad	80,383	120	17.88	19	2.76	...	...	...	27.04	...	...	...	...	...	...	135	56.56	83	29.76				
Saran	Saran	46,905	70	17.88	...	...	...	...	...	17.04	...	...	...	...	...	...	88	42.84	69	16.20				
Champan	Champan	23,713	83	35.80	...	...	...	...	...	37.44	...	...	...	...	...	...	78	19.92	78	19.92				
Muzaffarpur	Muzaffarpur	27,352	66	29.48	...	...	...	...	...	25.80	...	...	...	...	...	...	80	42.84	20	15.84				
Darbhanga	Darbhanga	49,192	75	39.48	...	...	...	...	...	29.92	...	...	...	...	...	...	110	22.92	52	27.56				
Monghyr	Monghyr	21,487	81	45.12	...	...	...	...	...	18.56	...	...	...	...	...	...	63	33.12	99	24.12				
Bhagalpur	Bhagalpur	75,561	904	33.24	30	4.80	...	...	...	13.92	...	...	...	...	...	...	216	55.16	196	31.92				
Cuttack	Cuttack	57,077	176	36.96	41	8.52	...	.60	...	28.92	...	...	...	...	...	...	231	46.44	142	29.76				
Balassore	Balassore	69,106	208	36.00	...	...	...	...	...	167	98.92	115	2.52	.94	19	5.34	203	55.16	166	28.80	Return returned for correction.			
Puri	Puri	20,775	54	31.08	34	19.56	...	...	...	11.52	...	...	...	...	...	...	75	43.32	62	35.76				
Lohardaga	Lohardaga	28,794	34	14.16	3	1.20	...	...	...	15.00	...	...	...	...	...	...	116	48.24	83	34.56				
Total of all towns with a population of 20,000 and over.	Total of all towns with a population of 20,000 and over.	1,895,512	3,539	21.12	756	4.44	105	.60	...	18.24	528	3.12	80	.48	1,394	8.28	5,897	35.40	4,573	27.48				
Average of the corre- sponding month of previous five years.	Average of the corre- sponding month of previous five years.	...	Complete figures of past 5 years are not available.	...	707	4.20	150	.84	...	11.76	408	2.40	76	.36	1,965	7.44	4,573	27.48	...	...				
Difference + or -	Difference + or -	...	...	...	+49	+24	-45	...	...	+1,067	+120	+72	...	...	+1,324	+84	...	+7.92	...	...				

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,  
The 9th June 1894.W. H. GREGG, Surgeon-Lieut.-Col., Dip. Publ. Health, Camb.,  
Sanitary Commissioner for Bengal.

Supplementary Vital Statistics of Districts and of Towns in Bengal for March 1894 received too late for publication with the figures of that month on the 12th May 1894.

DIVISIONS.	Districts.	BIRTHS.		DEATHS.																AVERAGE OF CORRESPONDING MONTH OF PREVIOUS FIVE YEARS.	
		Population under registration.	Ratio per 1,000 of population per annum.	CHOLERA.		SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		INJURY.		OTHER CAUSES.		TOTAL OF ALL CAUSES.		Ratio per 1,000 of population per annum.	Number regis-tered.		
				Number regis-tered.	Ratio per 1,000 of population per annum.	Number regis-tered.	Ratio per 1,000 of population per annum.	Number regis-tered.	Ratio per 1,000 of population per annum.	Number regis-tered.	Ratio per 1,000 of population per annum.	Number regis-tered.	Ratio per 1,000 of population per annum.	Number regis-tered.	Ratio per 1,000 of population per annum.	Number regis-tered.	Ratio per 1,000 of population per annum.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Burdwan Presidency Dacca	Hooghly	1,076,710	2,654	29.52	281	2.88	8	.08	2,185	24.24	212	2.28	32	.24	386	4.32	3,094	34.44	2,767	30.72	
	24-Parganas	1,892,033	4,616	29.16	1,051	6.60	8	.04	2,907	18.24	145	4.28	62	.36	341	2.16	4,514	28.56	4,049	25.68	
	Calcutta	8,472,186	9,368	34.08	1,001	5.36	44	.72	707	13.32	233	4.98	26	.36	689	12.12	2,070	36.36	1,629	28.68	
	Mymensingh	7,122,489	18,036	30.56	2,636	4.32	137	.12	10,307	17.28	628	.96	146	.24	2,173	3.60	16,383	27.84	5,280	18.24	
	Total for the Province	71,009,648	217,886	36.72	17,071	2.88	1,000	.12	131,349	21.96	3,384	.48	1,409	.24	25,715	4.32	179,027	30.12	158,028	26.64	
	Average of corresponding month of previous five years.	.....	Not available, as birth registration was introduced from the commencement of 1892.	.....	18,945	3.12	2,372	.36	110,042	18.48	3,686	.60	1,436	.24	21,547	3.60	168,028	26.64	.....	...	
	Difference + or -	.....	.....	.....	-1,874	-.24	-1,365	-.24	+20,307	+3.48	-302	-.12	+63	Equal.	+4,168	+7.2	+20,999	+3.48	.....	...	
Hooghly	Towns.	35,952	60	19.92	13	4.32	.....	.....	62	20.64	43	14.98	1	.24	11	3.60	131	43.32	92	30.60	
	Scrumpore	31,423	54	20.52	29	7.56	1	.36	21	7.92	8	5.00	1	.36	8	3.00	59	22.44	75	28.66	
	Cossimbore-Chitpore	32,835	31	11.28	16	6.76	.....	.....	23	8.28	9	4.72	.....	.....	1	.36	42	15.24	16	20.40	
	Maniktala	34,218	29	10.08	37	12.84	.....	.....	26	9.00	12	4.20	.....	.....	12	4.20	116	39.72	87	30.36	
	Barnasore	69,642	83	14.28	21	5.60	.....	.....	63	10.80	15	2.52	2	.24	15	2.52	116	19.92	76	13.08	
24-Parganas	South Suburban	35,647	14	4.68	8	3.60	.....	.....	31	10.32	8	2.64	.....	.....	4	1.32	47	15.72	83	27.84	
	Khordah or South Barrackpore	29,724	54	21.72	8	3.12	.....	.....	49	19.68	18	7.92	1	.36	10	3.96	86	34.68	68	27.36	
	Nalhati	20,980	22	12.48	23	13.08	.....	.....	51	29.16	5	2.76	.....	.....	7	3.96	86	49.08	58	33.12	
	Nawabganj or North Barrackpore.	681,560	908	15.96	329	5.64	44	.72	757	13.32	932	4.08	25	.36	689	12.12	2,070	36.36	1,629	28.68	
	Calcutta	972,071	1,255	15.48	463	5.64	45	.48	1,083	13.32	343	4.20	33	.36	757	9.24	2,724	33.60	2,224	27.36	
Total of all towns with a population of 20,000 and over.	Total	2,329,621	4,329	29.20	745	3.72	53	.24	3,365	17.28	686	3.48	59	.24	1,648	8.40	6,566	33.72	5,030	25.80	
	Average of the corresponding month of previous five years.	.....	Complete figures of past five years are not available.	.....	651	3.24	222	1.08	2,220	11.40	469	2.28	86	.36	1,391	7.08	5,030	25.80	.....	.....	
	Difference + or -	.....	.....	.....	+94	+4.8	-169	-.84	+1,145	+5.88	+236	+1.20	-27	-.12	+237	+1.32	+1,236	+7.92	.....	.....	

OFFICE OF SANY. COMM. FOR BENGAL,  
The 9th June 1894

W. H. GREGG, Surgn.-Lieut.-Col., Dip. Publ. Health, Camb.,  
Sanitary Commissioner for Bengal.



## IRRIGATION DEPARTMENT, BENGAL.

*Abstract statement showing Tollage on Canals in Bengal classed as Major Works for the month of April 1894, as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1894-95.			TOLLAGE, 1893-94.		
	During the month			During the month.		
	Rs.	A.	P.	Rs.	A.	P.
<i>Orissa Circle.</i>						
Taldanda Canal System	5,633	10	6	5,633	10	6
Kendrapara ditto	.....			8,944	12	2
High Level, Range I	152	9	6	1,374	8	3
Ditto, " II	8	4	3	271	11	0
Ditto, " III	4	1	3	149	12	6
Jajpur Canal	9	8	0	23	13	10
Total Orissa Circle	5,808	1	6	10,837	15	3
<i>South-Western Circle.</i>						
Midnapore Canal	9,933	1	9	8,630	4	0
Hijili Tidal Canal	7,530	13	6	5,808	0	9
Total South-Western Circle	17,463	15	3	14,438	4	9
<i>Sone Circle.</i>						
Patna Canal System	4,374	15	6	3,381	11	3
Arrah ditto	3,648	14	3	3,082	11	0
Buxar ditto	1,200	7	0	1,211	13	9
Total Sone Circle	9,224	4	9	7,676	4	0
GRAND TOTAL	32,496	5	6	32,952	8	0

## Government Transport Service.

CANAL.	TOLLAGE, 1894-95.						TOLLAGE, 1893-94.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Passengers.	Goods.	Total cepts.	Passengers.	Goods.	Total cepts.	Passengers.	Goods.	Total cepts.	Passengers.	Goods.	Total cepts.
<i>Orissa Circle.</i>	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.
High Level	...	...	264 15 0	...	...	264 15 0	1,403	1,540	1,656 14 3	1,403	1,540	1,656 14 3
Total Orissa Circle	...	...	264 15 0	...	...	264 15 0	1,403	1,540	1,656 14 3	1,403	1,540	1,656 14 3

## Total Navigation Receipts.

CANALS.	EARNINGS, 1894-95.			EARNINGS, 1893-94.		
	During the month.			During the month.		
	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals	6,073	0	6	12,494	13	6
Midnapore Canal	9,933	1	9	8,630	4	0
Hijili Tidal Canal	7,530	13	6	5,808	0	9
Sone Canals	9,224	4	9	7,676	4	0
Total	32,761	4	6	34,609	6	3

CALCUTTA,  
The 11th June 1894.

J. H. TOOGOOD,  
Under-Secy. to the Govt. of Bengal.



## IRRIGATION DEPARTMENT, BENGAL.

*Abstract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of April 1894, as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1894-95.		TOLLAGE, 1893-94.	
	During the month.	To end of the month.	During the month.	To end of the month.
	Rs.    A.    P.	Rs.    A.    P.	Rs.    A.    P.	Rs.    A.    P.
Calcutta and Eastern Canals ...	16,856    1    9	16,856    1    9	20,523    4    0	20,523    4    0
Tolly's Nala ...	5,716    12    6	5,716    12    6	5,966    10    6	5,966    10    6
Total ...	22,572    14    3	22,572    14    3	26,489    14    6	26,489    14    6
Orissa Coast Canal ...	5,018    1    9	5,018    1    9	7,153    14    6	7,153    14    6
Nadia Rivers ..	5,395    5    0	5,395    5    0	7,266    3    0	7,266    3    0
GRAND TOTAL ...	32,986    5    0	32,986    5    0	40,910    0    0	40,910    0    0

CALCUTTA,  
The 11th June 1894.

J. H. TOOGOOD,  
Under-Secy. to the Govt. of Bengal.

## CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 9th June 1894, as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 9TH JUNE 1894.			WEEK ENDING SATURDAY, THE 10TH JUNE 1893.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	458	57,250	671	207	33,225	503
Jute ...	15	6,125	85	8	2,750	47
Firewood ...	36	24,875	381	71	36,250	510
Other articles ...	662	2,05,510	2,270	715	1,70,125	2,349
Total ...	1,171	2,93,760	3,407	1,001	2,42,350	3,409

## EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the five weeks ending 23th April 1894,  
as compared with the same period of 1893.

STAPLES.	1893.		1894.		INCREASE.		DECREASE.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Mds.	Mds.	Rs.
Coal & Coke carried for the public and foreign railways ... ..	53,94,033	7,96,178	58,34,241	8,31,048	4,40,208	34,870	...	...
Cotton, raw ... ..	53,879	41,671	88,335	62,789	34,456	21,118	...	...
<b>Cotton, manufactured—</b>								
1.—Twist & Yarn, European ... ..	5,928	4,878	8,044	5,829	2,116	951	...	...
2.— Ditto Indian ... ..	21,984	12,505	24,674	14,857	2,690	2,352	...	...
3.—Piece-goods—European ... ..	1,14,567	1,13,643	2,46,238	2,74,113	1,31,671	1,60,470	...	...
4.— Ditto —Indian ... ..	14,062	8,996	18,552	8,552	4,490	...	...	1,444
<b>Drugs and chemicals—</b>								
1.—Intoxicating other than opium ... ..	1,204	774	273	169	...	...	931	575
2.—Non-intoxicating ... ..	10,450	8,981	9,178	7,077	...	...	1,272	1,904
<b>Dyes and tans—</b>								
1.—Indigo ... ..	436	390	419	271	...	...	17	119
2.—Myrabolams ... ..	37,894	10,309	24,231	6,503	...	...	13,663	3,806
3.—Cutch ... ..	2,582	1,188	3,856	1,552	1,274	364	...	...
4.—Turmeric ... ..	19,524	12,974	28,055	22,165	8,531	9,191	...	...
5.—Aniline dyes ... ..	1,054	493	195	203	...	...	859	290
6.—Others ... ..	3,464	2,478	2,556	2,026	...	...	908	452
<b>Grain &amp; Pulse—</b>								
1.—Wheat ... ..	3,99,515	1,45,782	6,11,712	1,82,905	2,12,197	37,123	...	...
2.—Rice in the husk ... ..	79,300	11,047	90,786	9,054	11,486	...	...	1,993
3.—Rice not in the husk ... ..	6,75,612	1,06,082	7,63,442	1,19,156	87,830	13,074	...	...
4.—Jawar and bajra ... ..	41,506	3,248	6,194	2,378	...	...	35,312	870
5.—Gram & pulse ... ..	3,35,658	1,04,260	3,82,946	1,17,009	47,308	13,540	...	...
6.—Others ... ..	47,678	11,370	81,755	20,400	34,077	15,039	...	...
<b>Hides and skins—</b>								
1.—Hides of cattle ... ..	57,828	37,874	49,995	30,581	...	...	7,833	7,493
2.—Skins of sheep, &c. ... ..	21,833	9,886	17,931	6,572	...	...	3,862	3,314
Horns ... ..	1,521	1,011	994	510	...	...	527	501
<b>Jute—</b>								
1.—Raw ... ..	36,609	11,498	26,539	8,609	...	...	10,070	2,869
2.—Gunny bags and cloth ... ..	2,04,220	1,10,015	1,45,554	82,588	...	...	58,666	27,427
<b>Lac—</b>								
1.—Stick ... ..	6,663	3,866	14,844	5,641	8,181	1,775	...	...
2.—Shell ... ..	14,744	11,554	16,622	13,064	1,478	1,510	...	...
Leather, Manufactured ... ..	5,240	6,701	6,787	8,619	1,547	1,918	...	...
<b>Liquors—</b>								
1.—Beer ... ..	10,167	5,096	8,576	5,059	...	...	1,591	7
2.—Spirits ... ..	1,605	1,985	1,500	1,393	...	...	45	592
3.—Wines ... ..	4,110	6,026	4,927	4,043	817	...	...	1,983
<b>Metals—</b>								
1.—Copper, unwrought ... ..	3,480	4,023	6,469	8,083	2,929	4,060	...	...
2.—Brass, unwrought ... ..	3,726	1,708	7,197	4,731	3,471	3,023	...	...
3.—Copper, wrought ... ..	1,184	937	1,386	1,292	202	355	...	...
4.—Brass, wrought ... ..	13,890	6,541	16,306	7,217	2,476	676	...	...
5.—Iron ... ..	2,69,768	1,23,665	1,54,025	67,578	...	...	1,15,683	56,087
6.—Others ... ..	11,201	8,331	11,156	8,814	...	483	45	...
7.—Zinc & spelter ... ..	5,172	3,747	6,776	5,018	1,604	1,871	...	...
<b>Oils—</b>								
1.—Kerosine ... ..	90,442	45,503	1,03,879	47,338	13,437	1,835	...	...
2.—Castor ... ..	5,232	1,263	5,180	1,454	...	191	52	...
3.—Coconut ... ..	2,742	1,064	6,246	2,044	3,504	980	...	...
4.—Others ... ..	8,700	3,699	10,703	4,654	2,003	1,955	...	...
<b>Oil-seeds—</b>								
1.—Linseed ... ..	12,45,078	4,07,554	11,68,159	3,50,593	...	...	76,919	56,961
2.—Rape and mustard ... ..	12,02,938	2,36,517	5,33,579	2,04,977	...	...	6,69,359	31,540
3.—Til or jingili ... ..	15,622	3,672	41,877	8,823	26,255	5,151	...	...
4.—Poppy ... ..	1,29,240	39,752	65,296	15,760	...	...	63,944	23,992
5.—Earthnuts ... ..	...	...	77	41	77	41	...	...
6.—Castor ... ..	1,55,065	43,704	94,578	28,521	...	...	60,487	13,183
7.—Others ... ..	18,902	3,613	11,220	1,857	...	...	7,682	1,756
Opium ... ..	22,323	10,791	16,531	8,807	...	...	6,792	1,984
<b>Paper and pasteboard ... ..</b>	12,292	8,745	11,685	7,430	...	...	607	1,315
<b>Provisions—</b>								
1.—Ghee ... ..	37,503	28,254	39,854	37,830	2,351	2,576	...	...
2.—Dried fruits and nuts ... ..	14,374	6,195	13,790	6,571	...	576	584	...
3.—Others ... ..	31,733	21,313	40,465	18,685	8,732	...	...	2,628
4.—Potatoes ... ..	42,546	6,808	58,764	7,508	16,218	700	...	...
<b>Railway plant &amp; rolling stock carried for the public &amp; foreign railways—</b>								
1.—Locomotive engines & tenders & parts thereof ... ..	...	...	...	...	...	...	...	...
2.—Carriages & trucks & parts thereof ... ..	...	...	...	...	...	...	...	...
3.—Steel rails & fish plates ... ..	...	...	1,79,168	71,211	...	...	...	...
4.—Sleepers & keys of steel & cast iron ... ..	...	...	938	440	...	...	...	...
5.—Other sorts ... ..	88,700	29,170	73,748	11,682	1,65,084	54,163	...	...
Salt ... ..	6,24,344	1,12,873	5,98,063	1,24,319	11,446	26,275	...	...
<b>Saltpetre, &amp;c.—</b>								
1.—Saltpetre ... ..	75,896	19,658	83,460	32,063	7,568	12,405	...	...
2.—Other saline substances ... ..	29,666	10,499	62,790	18,984	33,134	8,483	...	...
<b>Silk, raw—</b>								
1.—Foreign ... ..	...	...	...	...	...	...	...	...
2.—Indian ... ..	3,952	1,967	2,535	1,079	...	...	1,417	888
<b>Silk piece-goods—</b>								
1.—Foreign ... ..	10	34	14	41	4	7	...	...
2.—Indian ... ..	547	539	674	1,120	127	581	...	...

STAPLES.	1893.		1894.		INCREASE.		DECREASE	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
<i>Spices—</i>								
1.—Betelnuts ... ..	33,996	23,827	22,320	17,121	...	...	11,676	6,706
2.—Pepper ... ..	3,617	3,284	4,407	4,339	...	790	...	...
3.—Ginger... ..	1,179	892	2,650	2,005	1,477	1,113	...	...
4.—Chillies ... ..	38,563	30,651	35,565	27,499	...	...	2,998	3,152
5.—Cardamoms ... ..	1,461	1,525	1,224	1,694	...	69	237	...
6.—Other ... ..	2,063	1,260	3,217	1,650	1,154	384	...	...
Stone and lime ... ..	5,05,623	76,497	4,17,693	65,145	...	...	87,930	11,352
<i>Sugar—</i>								
1.—Refined ... ..	32,675	11,128	19,761	6,854	...	...	12,914	4,274
2.—Unrefined ... ..	6,43,537	1,45,654	8,62,007	1,00,830	2,18,470	...	...	35,824
<i>Tea—</i>								
1.—Foreign ... ..	...	...	...	...	...	...	...	...
2.—Indian ... ..	936	543	1,076	627	140	84	...	...
Timber ... ..	1,17,967	21,515	1,11,022	20,936	...	...	6,945	579
Tobacco ... ..	2,15,411	1,01,188	74,544	34,155	...	...	1,40,867	67,033
Wool, Raw ... ..	2,053	1,422	3,455	2,450	1,402	1,028	...	...
<i>Wool manufactured—</i>								
1.—Piece-goods, European ... ..	275	237	37	37	...	...	238	290
2.—" Indian ... ..	1,883	2,382	1,440	1,353	...	...	443	1,029
3.—Shawls ... ..	...	...	...	...	...	...	...	...
<i>All other articles of merchandise—</i>								
1.—Firewood ... ..	67,198	6,044	47,528	4,211	...	...	19,670	1,833
2.—Indigo seed ... ..	20,234	6,747	21,440	4,233	...	...	4,794	2,514
3.—Mowah flower ... ..	42,864	6,742	25,867	3,496	...	...	16,997	3,246
4.—Oil-cake ... ..	70,533	15,386	76,791	13,830	6,168	...	...	1,556
5.—Paints & colours ... ..	21,996	4,372	20,035	3,074	...	...	1,961	1,298
6.—Seeds other than oilseeds ... ..	49,725	27,444	70,387	35,420	20,662	5,976	...	...
7.—Wooden articles ... ..	12,435	5,042	13,569	6,731	1,134	1,089	...	...
8.—Others ... ..	7,58,031	2,74,669	6,80,386	2,88,618	...	13,949	77,645	...
<b>Total ...</b>	<b>1,44,41,213</b>	<b>35,64,255</b>	<b>1,44,61,606</b>	<b>36,34,197</b>	<b>20,393</b>	<b>69,942</b>	<b>...</b>	<b>...</b>
<i>Military stores ...</i>	<i>23,177</i>	<i>22,954</i>	<i>20,981</i>	<i>35,090</i>	<i>...</i>	<i>12,736</i>	<i>2,196</i>	<i>...</i>
<i>Coal for Railway ...</i>	<i>6,67,713</i>	<i>80,087</i>	<i>8,05,774</i>	<i>96,275</i>	<i>1,38,061</i>	<i>16,183</i>	<i>...</i>	<i>...</i>
<i>Railway materials ...</i>	<i>9,98,813</i>	<i>41,091</i>	<i>20,58,689</i>	<i>67,194</i>	<i>10,69,876</i>	<i>20,193</i>	<i>...</i>	<i>...</i>
<i>Live-stock ...</i>	<i>...</i>	<i>6,790</i>	<i>...</i>	<i>8,510</i>	<i>...</i>	<i>1,511</i>	<i>...</i>	<i>...</i>
<b>Total ...</b>	<b>1,61,80,916</b>	<b>37,15,096</b>	<b>1,73,47,050</b>	<b>38,41,606</b>	<b>12,16,134</b>	<b>1,26,510</b>	<b>...</b>	<b>...</b>

T. SIMPSON, Assistant Auditor.

TRAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, the 7th June 1894.



## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 2nd June 1894, on 1,659 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	289,676	Rs. A. P. 2,81,569 7 0	Mds. S. 33,62,292 10	Rs. A. P. 7,53,247 1 0	Rs. A. P. 18,521 4 0	Rs. A. P. 10,53,337 12 0	75,912	132,954	208,866
Or per mile of railway ...	.....	169 11 7	.....	454 0 7	11 2 7	634 14 9	.....	.....	.....
For previous 20½ weeks of half-year ...	7,034,197	76,95,495 8 0	7,11,99,710 30	1,56,90,736 5 0	3,79,183 2 0	2,37,65,413 15 0	1,661,923½	2,682,303½	4,344,227½
Total for 21½ weeks ...	7,323,873	79,77,064 15 0	7,45,62,003 0	1,64,43,983 6 0	3,97,703 6 0	2,48,18,751 11 0	1,737,835½	2,815,257½	4,553,093½
COMPARISON.									
Total for corresponding week of previous year ...	311,851½	2,82,721 8 10	30,80,447 0	7,62,521 0 9	16,662 14 1	10,61,905 7 8	75,362	132,622	208,984
Per mile of railway corresponding week of previous year ...	.....	175 8 9	.....	473 7 6	10 5 7	659 5 10	.....	.....	.....
Total for corresponding 22 weeks of previous year ...	6,456,815½	69,75,271 2 0	6,78,13,083 0	1,54,88,102 2 6	4,32,425 5 7	2,28,95,793 10 1	1,694,891	2,620,652	4,315,543

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 2nd June 1894, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	21,050	Rs. A. P. 5,327 9 0	Mds. S. 20,767 10	Rs. A. P. 741 6 0	Rs. A. P. 15 6 0	Rs. A. P. 5,983 15 0	871	97	968
Or per mile of railway ...	.....	234 15 2	.....	33 5 2	0 10 9	268 15 1	.....	.....	.....
For previous 20½ weeks of half-year ...	*503,425	*1,30,840 13 0	†3,98,092 10	†15,290 13 0	‡282 0 0	1,46,413 10 0	18,753	2,126	20,878
Total for 21½ weeks ...	524,475	1,36,068 6 0	4,19,369 20	16,032 3 0	297 0 0	1,52,397 9 0	19,623	2,223	21,846
COMPARISON.									
Total for corresponding week of previous year ...	20,211½	5,119 12 9	5,354 30	208 3 0	3 14 6	5,331 14 3	900	68	968
Per mile of railway corresponding week of previous year ...	.....	230 1 8	.....	9 5 8	0 2 10	239 10 2	.....	.....	.....
Total for corresponding 22 weeks of previous year ...	507,552½	1,33,038 7 9	2,53,451 10	8,717 11 0	231 9 0	1,41,987 11 9	19,689	2,251	21,940

\* Added number of passengers 532 and deducted Rs. 100 } on account of difference between the approximate and audited figures for the week ended 28th April  
† Ditto Mds. 1,463 and " 24 }  
‡ Deducted " 8 } 1894.

## DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for the week ended 2nd June 1894, on 161½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	17,765	Rs. A. P. 12,469 8 0	Mds. S. 49,744 0	Rs. A. P. 7,534 4 0	Rs. A. P. 83 0 0	Rs. A. P. 20,086 12 0	5,971	2,974	8,945
Or per mile of railway ...	.....	77 4 1	.....	46 10 11	0 8 3	124 7 3	.....	.....	.....
For previous 20½ weeks of half-year ...	*515,658	*3,94,445 5 0	†14,23,006 20	†1,95,986 14 0	‡1,690 0 0	5,92,122 3 0	122,636	71,475½	193,511½
Total for 21½ weeks ...	533,423	4,06,914 13 0	14,72,750 20	2,03,521 2 0	1,773 0 0	6,12,208 15 0	128,007	74,449½	202,456½
COMPARISON.									
Total for corresponding week of previous year ...	18,351½	11,821 14 11	76,003 10	11,371 12 0	27 14 6	23,221 9 5	6,157	2,932	9,089
Per mile of railway corresponding week of previous year ...	.....	73 3 11	.....	70 7 4	0 2 9	143 14 0	.....	.....	.....
Total for corresponding 22 weeks of previous year ...	416,383½	3,08,668 11 6	16,21,621 20	2,03,969 14 3	1,621 11 0	5,13,660 4 9	129,563	71,464	201,027

\* Added number of passengers 1,923 and Rs. 1,951 } on account of difference between the approximate and audited figures for the week ended 28th April 1894.  
† Do. Mds. 15,205 and deducted " 196 }  
‡ Deducted " 13 }



## BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

*Approximate Return of Traffic for the week ending 2nd June 1894, on 756 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 756 miles open	115,050	Rs. 48,200	Mds. 513,790	Rs. 76,250	Rs. 9,010	(b) 1,33,460	12,630	23,075	35,705
Or per mile of railway	152'18	63'75	679'62	100'86	11'92	176'53	.....	.....	.....
For previous 20½ weeks of half-year (a)	2,281,496	9,89,852	9,338,891	13,45,097	2,61,622	25,96,571	297,013	401,097	698,110
Total for 21½ weeks	2,396,546	10,38,052	9,852,081	14,21,347	2,70,632	27,30,031	309,643	424,172	733,815
COMPARISON.									
Total for corresponding week of previous year on 756 miles open	107,904	40,785	508,295	65,047	12,399	1,18,231	13,795	21,569	35,364
Per mile of corresponding week of previous year	142'73	53'95	672'35	86'04	16'40	156'39	.....	.....	.....
Total to corresponding date of previous year	2,236,489	9,54,021	10,652,837	15,03,805	3,12,409	27,70,235	300,936	435,591	736,527

(a) Includes audited figures up to week ending 21st April 1894.

(b) Due to improvement in traffic.

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

						Rs.	A.	P.
Approximate earnings for the week ending 2nd June 1894	...	...	...	...	...	14,413	0	0
Corresponding period of 1893	...	...	...	...	...	14,213	0	0
Increase	...	...	...	...	...	200	0	0
Receipts per mile for the week ending 2nd June 1894	...	...	...	...	...	282	9	9
Corresponding period of 1893	...	...	...	...	...	278	10	10
Increase	...	...	...	...	...	3	14	11
Receipts from 1st January to 2nd June 1894	...	...	...	...	...	2,53,912	0	0
Corresponding period of 1893	...	...	...	...	...	2,61,702	0	0
Decrease	...	...	...	...	...	7,790	0	0





# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, JUNE 20, 1894.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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### RESOLUTION ON THE ADMINISTRATION REPORTS OF THE ALIPORE AND HAZARIBAGH REFORMATORY SCHOOLS FOR THE YEAR 1893.

RESOLUTION.—No. 570P.D.

JAILS.

*Darjeeling, the 14th June 1894.*

READ—

- (1) Letter No. 5195, dated the 23rd April 1894, from the Inspector-General of Jails, forwarding the Administration Report of the Alipore Reformatory School for the year 1893.
- (2) Letter No. 5196, dated 23rd April 1894, from the Inspector-General of Jails, forwarding the Administration Report of the Hazaribagh Reformatory School for the year 1893.

Read also—

The Reports for the year 1892, and the orders of Government recorded thereon.

*The Alipore School.*—The daily average number of boys in this Reformatory rose from 168 in 1892 to 211 in 1893. There were 70 admissions during the year, and 27 releases and 4 deaths. Notwithstanding the increase in the daily average number of boys, it is satisfactory to notice that the number of offences fell from 76 to 73, and that the average number of punishments to each boy was only .35 as compared with 1.02 in 1890, 0.66 in 1891, and 0.45 in 1892.

The average number of boys entitled to marks was 148·46 against 113·5 in 1892, and the weekly average earnings rose from Rs. 4-3-3 to Rs. 5-1-9. Owing to the unhealthiness of the year, due to the excessive rainfall, the number of admissions to hospital rose from an average of 2·96 in 1892 to 5·04. There were four deaths, one of which was from chronic dysentery, two from malarial cachexia, and the fourth from spleen and cancer of the tongue. No boy escaped from the Reformatory during the year.

2. The additional quarters completed for the warder staff in 1892 were made over for their use in 1893, and a godown for the storage of rice, &c., for the boys' rations was constructed. The arrangements for the education, work and recreation of the boys continued the same as in past years. The boys exercise at gymnastics for one hour daily, and as much as they please during play hours and on Sundays, and under the instruction of a duly qualified teacher they are reported to have made great progress.

3. Reports regarding 66 boys who had been released from the Reformatory were received from Magistrates during the year. Of these eight had been reconvicted and sent to jail, one bore a bad character, one had died, and 56 bore good characters. Out of 287 boys released since the opening of the school, regarding whom reports have been received, 39 have been reconvicted and imprisoned, 43 have been reported as bearing bad characters, and 205 as bearing good characters. Of the total number only 31 are said to be following the trade learnt by them in the Reformatory. Every effort is, however, made to encourage the boys to take up the trade for which they show the most inclination.

4. In consequence of the larger number of boys confined in the school, the total expenditure for the year rose from Rs. 18,298-1-4 in 1892 to Rs. 21,113-9-7, but the average cost per head fell from Rs. 108-14-6 to Rs. 100-1-1. The average expenditure per head on diet was Rs. 38-10-7 as compared with Rs. 34-9-2 in 1892, the increase being attributed to the higher rates of rations prevailing, the average price of rice alone having risen from Rs. 3-7-3 to Rs. 3-13 per maund. In the Alipore Central Jail the expenditure per prisoner on diet in 1893 was only Rs. 27-12-6, and it is difficult to understand why the food of boys should cost so much more than that of men. The price paid for rice seems unduly high, and the Lieutenant-Governor trusts that by a judicious working of the system of storing grain at the cheap season of the year, a considerable reduction in expenditure under this head may be effected. The net profits from the manufacturing department fell from Rs. 12,259-3-4 to Rs. 10,886-14-9, being a decrease of Rs. 1,372-4-7, which occurred wholly under the heads 'Book-binding' and 'Printing.' The decrease is explained partly by the fact that the work of binding and printing, which is now done together, is slower of execution than when done separately, and partly owing to a large number of the boys having been engaged in making the small envelopes used in packing quinine—a work which is less remunerative than other kinds of binding.

5. *The Hazaribagh School.*—The daily average number of boys in the school was 302·38 as compared with 300·93 in 1892. Sixty-seven boys were admitted during the year, one died, and 63 were released, while the number remaining in confinement on the 31st December 1893 was 304. The general health of the boys was unusually good, the daily average of sick having fallen from 2·89 to 1·52, and for several months in the later part of the year there was not a single admission to hospital. The conduct of the boys was satisfactory, and there were no serious offences. The total number of offences committed and of punishments awarded was 272 against 266 in the preceding year. The arrangements for the education, work and recreation of the boys were practically the same as in former years. Gymnastic exercises were, however, for the first time introduced during the year, and the services of the instructor attached to the Alipore Reformatory were lent to the Hazaribagh School for two months to start the Gymnasium. It is reported that great progress has already been made by many of the boys, and that they are beginning to take an interest in these exercises.

6. The total expenditure per head was Rs. 73-1-5 against Rs. 77-11-7 in 1892. The expenditure per head on diet fell from Rs. 29-1-9 to Rs. 26-3-4, which is almost the same as the rate per head in the Hazaribagh Jail: the decrease as compared with last year is accounted for by the timely storage of wheat and rice at the cheap season of the year—a result which is creditable to



the management of the institution. All the suitable land attached to the Reformatory was brought under cultivation, and the value of the crops produced thereon is estimated at Rs. 500. The net profits on articles manufactured in the school increased from Rs. 3,437-9-8 to Rs. 3,826-8-8. This was mainly due to the success in the cotton-weaving and clothes-making trades, the profits on which alone during the last year amounted to Rs. 2,720. The packing and distribution of quinine were discontinued in the early part of the year. The Superintendent is, however, of opinion that some new and more profitable industry should be started, and the Superintendent of Jail Manufactures has suggested paper-making. On this question the Lieutenant-Governor would like a fuller report to be submitted through the Inspector-General of Jails.

7. The Lieutenant-Governor regrets to observe that the reports received from District Magistrates regarding the conduct of boys released from the school are less favourable than in the preceding year. Such reports were received regarding 101 boys, and of these 72 were reported to be well-conducted, 13 were in jail, seven were viewed with suspicion, while only two were reported to be following the trade learnt in the school.

8. Several improvements in the arrangement of the school buildings were made during the year. In addition to the opening of the Gymnasium already referred to, a new cook-house on the model of that in the Presidency Jail has been completed, an elaborate pump has been fixed in the well, and pipes have been laid down to carry the water to the cook-house and feeding place. Sanction for the erection of 25 cubicles has been given, but additional accommodation in the school is urgently required, and should be provided without delay.

9. The results of the year are, on the whole, very satisfactory, and the successful working of the school reflects credit on Mr. Hill, the Deputy Superintendent, who is spoken of in high terms by the Inspector-General of Jails, and by all who have had occasion to visit the school.

ORDER—Ordered that a copy of this Resolution be forwarded to the President of the Board of Management of the Reformatory School at Alipore for information and communication to the Members of the Board.

Ordered also that a copy of the Reports, and a copy of this Resolution, be forwarded to the Inspector-General of Jails for information and communication to the Superintendent of the Hazaribagh Reformatory School.

Ordered also that the Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

*Chief Secretary to the Govt. of Bengal.*



RESOLUTION ON THE ANNUAL REPORT OF THE ROYAL BOTANIC GARDEN, CALCUTTA, FOR THE YEAR 1893-94.

FINANCIAL DEPARTMENT—MISCELLANEOUS.

*Darjeeling, the 13th June 1894.*

RESOLUTION No. 3462 Mis.

The Annual Report of the Royal Botanic Garden, Calcutta, for the year 1893-94.

Read again—

The Annual Report of the Royal Botanic Garden, Calcutta, for the year 1892-93 with the Resolution recorded thereon.

Dr. King's report gives an interesting account of the operations during the past year. A severe storm occurred in May, and though in the conservatories little damage was done, several trees outside were completely uprooted. Among the principal improvements effected during the year may be mentioned the repairs to Colonel Kyd's monument—a beautiful urn and obelisk—raised in memory of the founder of the garden. Several garden roads were also repaired, and altogether the gardens have been maintained in a high state of efficiency.

2. Attention was given as usual to the cultivation and distribution of plants having an economic value, which are suitable for cultivation in the plains of India. Of these the principal were plants of the rhea, of sissal hemp, of the cola nut, seeds of *bhabar* grass (*Ischaemum angustifolium*) and *coca*. Dr. King remarks with reference to the latter that this alkaloid can never come into general use, and that the demand is at present greatly below the supply. The Lieutenant-Governor shares his regret that his efforts to extend in Bengal the cultivation of the Japan-paper mulberry tree have met with so little success as this tree (of which a small stock still is available) provides an admirable fibre for paper.

3. The collection in the Herbarium was increased by more than 16,000 specimens, the chief contributors being Mr. Thiselton Dyer, Director of the Royal Garden, Kew; Mr. Duthie, Director of the Botanical Survey of Northern India; and Mr. Ridley, Director of the Botanical Garden, Singapore. Valuable sets of plants were also received from Mr. Man (Port Blair), Mr. Elliott (Egypt), Dr. Radde (Tiflis), Mr. Curtis (Penang), Baron Von Müller (Melbourne), Mr. Wood (Natal), Mr. Sykes Gamble (Dehra-Dun), Mr. Talbot (North Kanara), and Mr. Haines (Jalpaiguri). To all these donors the thanks of the Government are due. The members of the garden staff, who also contributed to the collections, were Dr. Prain, Curator of the Herbarium, Mr. Pantling of the Cinchona Plantation, and two native collectors in Assam and Upper Burma. On the other hand a large number of specimens was sent out from the garden to various botanical institutions, among which may be mentioned the Botanical Survey Departments of Bombay and Northern India, the Botanical Gardens of Singapore and Penang, the Royal Garden, Kew, the British Museum, the Herbaria of Cambridge, Edinburgh, Cork, Berlin, Paris, Geneva, Leiden, Utrecht, Vienna, Upsala, St. Petersburg and Florence, as well as to Cooper's Hill College, and the Smithsonian Institution, Washington.

4. During a portion of the year Dr. Prain was deputed to undertake an enquiry into the cultivation and storage of ganja, and he submitted an interesting and valuable report, the final orders of Government upon which have been postponed till the report of the Indian Hemp Drugs Commission has been received.

5. The fourth volume of the Garden Annals was published during the year, comprising of a monograph by Dr. King on the Indian species of *Anonaceae*. Both Dr. King and Dr. Prain contributed valuable papers on botanical subjects to the Journal of the Asiatic Society of Bengal.

6. The Lloyd Botanic Garden in Darjeeling has been kept in excellent condition by Mr. Kennedy, who also superintended the planting of trees in many parts of the station.

7. The thanks of the Lieutenant-Governor are again due to Dr. King for his excellent administration of the Garden during the year and to Dr. Prain for his assiduous and exhaustive enquiries above mentioned.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

*Offg. Secretary to the Govt. of Bengal.*

No. 16G., dated Royal Botanic Garden, Sibpur, the 15th May 1894.

From—GEORGE KING, Esq., M.B., F.R.S., C.I.E., Superintendent, Royal Botanic Garden, Calcutta,

To—The Secretary to the Government of Bengal, Financial Department.

I HAVE the honour to submit herewith the one hundred and seventh Annual Report of the Royal Botanic Garden.

ANNUAL REPORT OF THE ROYAL BOTANIC GARDEN, CALCUTTA, FOR THE  
YEAR 1893-94.

THE most notable feature in the meteorology of the year was the severe storm, almost amounting to a cyclone, which raged for the greater part of three days during the month of May. This storm did considerable damage to the trees both in the way of complete uprootal and in the breaking of branches. So great was the destruction, that the whole of the out-door labour staff was engaged for about six weeks in setting up and fastening with wire such trees as were small enough to be set up, and in clearing away leaves and broken stems and branches. The garden buildings, however, escaped, and even the conservatories suffered little beyond the almost complete loss of their thatch. From the extra grant of money provided for the purpose, the road which circles round Kyd's monument, and two of the roads radiating from it, were raised in level and repaired. An old bridge on the main avenue, leading from Kyd's monument to the river bank gate, was remodelled, and the roadway was widened. As the result of these changes, a fine avenue of the uniform width of 22 feet now runs between Kyd's monument and the gate just mentioned. As the latter will, owing to the rapidly approaching completion of the new river bank road leading from Calcutta, soon be the main entrance to the garden by land, the improvement is one of prime importance. The platform on which Kyd's monument stands had for some years been in bad repair, the mosaic pavement having suffered greatly from the weather. During the year that pavement was replaced by one of more suitable material; so that the monument to the memory of the founder of the garden (a beautiful urn and obelisk by Banks) is now in a setting more befitting its beauty and interest. With the view of improving the part of the garden near what will shortly become its main entrance by land, much labour has, during the past two or three years, been spent on the three main roads which lead to that entrance. Two of these have already been put into excellent condition. But the third—that which runs along the river bank—is still in a bad state. During the year which has just been entered upon, I hope to put that road also into good condition. The existing road (like so many of the older garden roads) requires to have its levels altered in many places; its curves also require to be improved, and the slopes and undulations of the grass by the sides of it are sadly in want of improvement. This kind of work is so troublesome and laborious that only a limited amount of it can be undertaken in any one year. The current year should see the completion of the Palmetum roads. There will then remain the road leading from the river gate to the great banyan tree, and several other main roads in the centre of the garden. During the rainy season the river did but little injury to the bank; and the erosion near the engine-shed, which in my last report I referred to as probably pending, did not, I am glad to say, take place. During the year the flock of water-fowl on the orchid-house tank was increased by a further donation from Mr. Thiselton Dyer, the Director of the Royal Garden, Kew. There are now about as many birds in this tank as can conveniently be looked after and housed. For some years past there has been considerable difficulty in getting and keeping together a gang of coolies for the out-door garden work. During the past year this difficulty has been more keenly felt than ever. The coolies who prove by far the most suitable for garden work are the people known in Calcutta as "Dhangars." These are really Kols from Chota Nagpur. They are a hard-working docile race, and their merits as labourers are now so generally known, not only in the neighbourhood of Calcutta, but also in the tea districts, that there is great competition for their services; and higher rates of wages are everywhere being offered to them. Moreover,



the cost of food has for some years been almost steadily on the increase. It seems clear, therefore, that, in order to secure the continuous services of a good gang of these coolies for this garden, better wages than heretofore will have to be given.

2. *Economic plants*.—Attention has, as usual, been given to the cultivation and distribution of plants of economic interest which are suited for cultivation on the plains of India. Rhea plants still continue to be in occasional demand, and supplies of these have been issued gratuitously to various applicants. Seeds of *Coca* have been freely given to various tea-planters. *Coca* is the plant from which the anæsthetic, known as *cocaine*, is prepared. This alkaloid can, from the nature of it, never come into very extensive use, and the demand for it is at present greatly below the supply. But, as high prices have occasionally within recent years been got for batches of coca leaves, planters have been led into taking up the cultivation with more enthusiasm than discretion. Plants of Sissal hemp were in active demand for a time, and these were met as far as possible. *Cola acuminata* (which produces the Cola nut) was also in demand to some extent. Seed of the grass, known variously as *bhabar*, *babui*, and *sabai*, was issued to a few applicants outside of India. This grass (of which the botanical name is *Ischaemum angustifolium*) first attracted my notice as a possible raw material for paper twenty-five years ago, while I was in the Forest Department in the North-West Provinces. It is very common in the Siwalik range, and in the Bhabar forests of the Gharwal and Kamaon Himalaya. Samples of it, sent home by me in 1873 to a paper-maker in Scotland, were favourably reported upon; and again in 1877 a sample sent by me to the India Office, having been submitted to the late Mr. Routledge of the Ford paper mills (then a leading authority on paper making), was declared by him to be little inferior to *Esparto* as a raw material for paper. A year or two subsequently to this it was discovered, by the help of Mr. J. S. Gamble of the Forest Department, that this grass is common in the forests of Chota Nagpur. Samples of it were accordingly sent by me to the Bally Paper Mill, then the only one near Calcutta. The sample was approved of at Bally, and since then the use of this grass has so increased that it now forms the chief raw material of an industry which, in this country, is yet probably only in its infancy. As seed of bhabar grass is now being applied for from abroad, it is possible that, before long, it may be cultivated in other tropical countries. It is a subject of much regret to me that my efforts to extend the cultivation of the Japan paper mulberry tree in Bengal have hitherto led to so little result. The fibre of this tree is much superior to *bhabar*, and, as I stated in several of my annual reports some years ago, it can be most readily grown in Bengal. There is still a small stock of the tree in the garden ready for issue to any applicant who may be forthcoming.

3. *Herbarium*.—The work during the year has been of the usual character, many scientific references having been answered and plants having been identified for numerous correspondents. The collection was largely increased during the year by the receipt of 16,387 specimens from other herbaria, from botanists in various parts of the world, and from collectors sent out from the garden. On the other hand, 12,517 specimens of Indian plants (all carefully named) were issued to various botanical institutions, both in this country and in Europe. The chief contributor has, as usual, been the Director of the Royal Garden, Kew (Mr. W. T. Thiselton Dyer), from whom no less than 5,854 named specimens were received. The gentlemen next to Mr. Dyer in the extent and value of their gifts were Mr. J. F. Duthie, Director of the Botanical Survey of Northern India, and Mr. H. N. Ridley, Director of the Botanic Garden, Singapore, who contributed respectively 1,427 and 1,509 specimens. A fine set of Andamans plants, amounting to 611 specimens, was collected under the supervision of Mr. E. H. Man of Port Blair, to whom this garden is indebted for much willing help. Valuable sets of plants were also received from the following:—Mr. J. Scott Elliot, who sent 295 Egyptian species; Dr. Radde of Tiflis, who gave 353 plants of the Caucasus; Mr. Curtis of the Forest Department who presented 221 species from Penang. Baron Von Muller of Melbourne also supplemented his liberal contributions of former years by presenting last year 305 interesting Australian plants. To Mr. Medley Wood, the Herbarium is



indebted for 236 specimens from Natal; to Mr. J. Sykes Gamble, Director of the Imperial Forest School, for 164 plants from Dehra Dun; to Mr. W. A. Talbot and to Mr. H. H. Haines, of the Indian Forest Department, for 45 plants from the forests of North Kanara and from those of the Jalpaiguri district, respectively. The collections made by members of the staff during the year included 439 plants by Dr. Prain; 1,397 by Mr. Pantling of the Cinchona plantation; 376 by Abdul Huc, botanical collector in Assam; and 1,018 by Abdul Kholil, collector in Upper Burma. The chief recipients of specimens were the Directors of the Botanical Survey of Bombay and of Northern India, to whom 617 and 292 named specimens were respectively sent. The Botanical Gardens of Singapore and Penang received respectively 477 and 529 specimens. To the Herbarium of the Royal Garden, Kew, 423 specimens, and to that of the British Museum 679 specimens were sent. Other recipients were institutions from whom plants had been received, and the botanical institutions of England and of the continent of Europe, chief amongst which may be mentioned the Herbaria of Cambridge, Edinburgh, Cork, Berlin, Paris, Geneva, Leiden, Utrecht, Vienna, Upsala, St. Petersburg and Florence. Collections were also sent to Cooper's Hill College near London, and to the Smithsonian Institution, Washington. Full details, both of the specimens received and of those distributed, will be found in Appendices V and VI of this report.

4. *Enquiry into Ganja cultivation.*—During three months of the year, Dr. Prain, Curator of the Herbarium, was on special duty in connection with an enquiry into the mode of cultivation and storage of the various preparations of Indian hemp (*Cannabis sativa*) known by the vernacular names of *ganja*, *charas*, *bharg* and *majun*. The chemistry and physiological action of these drugs were also included in the scope of Dr. Prain's enquiry. The research was a very arduous one. It was, however, brought to a successful termination by Dr. Prain, who submitted, as the result of his labours, an exhaustive report which has, I understand, been of the greatest use to the Commission recently appointed to enquire into the whole subject of ganja.

5. *Botanical publications.*—During the year Dr. Prain contributed to the journal of the Asiatic Society of Bengal four papers on Indian Botanical subjects, in which a good many species of plants are described for the first time. The titles of these papers are "*On two species of Pedicularis*"; "*A review of the genus Colquhounia*"; "*On the Flora of Narcandam and Barren Island*," and a "*Note on some methods of preparing Botanical specimens*." To the same journal I contributed parts 5 and 6 of my "*Materials for a Flora of the Malayan Peninsula*," and a paper on the Indian species of *Canarium*. During the year also the fourth volume of the Annals of the Garden was published, the whole volume being occupied by a monograph by myself of the Indian species of *Anonaceæ*. Prefixed to the volume is a biography (with portrait) of Colonel Robert Kyd, the founder of the garden, who died a hundred years ago.

6. *Library.*—A small number of books were acquired by purchase, and a few were received as a donation from the Royal Garden, Kew, while many volumes were re-bound.

7. *Interchange of plants and seeds.*—In appendices I to IV will be found full details of the receipts and issues both of plants and of seeds. The totals of these are as follows:—

*Plants*—Received 18,403; issued 58,512;  
*Seeds*—Packets received 858; issued 2,625.

As the lists show, the issues were chiefly for public purposes.

8. *Lloyd Botanic Garden, Darjeeling.*—This garden was, during the entire year, under the charge of Mr. W. A. Kennedy, who not only kept it in excellent condition during the year, but who also superintended the planting and conservation of trees by various roadsides and in odd corners in many parts of the station.

9. For both gardens the budget allotments of funds were spent in full, as was also an additional grant of Rs. 5,000 made to the Calcutta Garden for road-making and other improvements. The revenue derived from the sale of surplus plants and seeds at the Calcutta Garden was Rs. 2,215-9-6, and that at Darjeeling Rs. 877, both sums being slightly in excess of the estimates.

10. On his return from special duty on the enquiry into *Ganja*, Dr. Prain (whose health had been much impaired by his labours) went on three months' privilege leave. During the remaining six months of the year he performed the duties of Curator of the Herbarium with his accustomed energy and devotion. While Dr. Prain was absent on leave, Mr. G. A. Gammie, of the Cinchona Department, officiated as Curator of the Herbarium and worked with great assiduity. Mr. Gammie is already known to Government by the interesting botanical tour which he made two years ago in a previously very little known part of the Eastern Himalayan. Mr. R. L. Proudlock was Curator of the Garden during the year and did excellent service. Mr. G. T. Lane, the Assistant Curator, also worked most cheerfully. Towards the close of the year the staff was recruited by the arrival from Kew of Mr. Davies. Mr. Kennedy was in charge of the Darjeeling Garden during the year and worked to my satisfaction, as did also Babu Gopal Chandra Datta and the other members of the Garden, office and out-door staff.

11. In the six appendices which accompany this report will be found full details of all receipts and issues for the nursery, seed-house and Herbarium.

## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 16th June, 1894.

No.	District-and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
BURDWAN DIVN.	1 Burdwan June 16, '94	1.30	Weather—damp and cloudy. The late rain has done much good. Sowing of <i>aman</i> paddy in progress. Fodder and water sufficient. Prices of common rice:—
	Kalna ...	4.15	
	Katwa ...	1.77	
	Raniganj ...	1.65	
	2 Birbhum „ 16, '94	3.59	Weather—has been of ordinary monsoon character. <i>Til</i> doing fairly. Land being ploughed and manured and sown with paddy. Sugarcane being planted. Common rice sells from 14 to 17 seers per rupee in the Sadar subdivision, and from 15 to 18½ seers in Rampur Hât. Cattle get fodder.
	Rampur Hât ...	1.91	
	3 Bankura „ 16, '94	3.21	Weather—seasonable. Cultivation of land going on briskly. Prices of coarse rice:—
	Vishnupur ...	4.04	
	4 Midnapore „ 16, '94	3.92	Weather—seasonable. Agricultural outlook favourable. Sugarcane and indigo doing well. Fodder and water sufficient. Prices of common rice:—
	5 Hooghly „ 16, '94	2.98	The rains have broken. Cultivation of <i>aus</i> , jute and winter rice in progress. <i>Aus</i> and jute doing well and making up lost time. Fodder and water sufficient. Prices of common rice:—
	Serampore ...	1.86	
	Jahanabad ...	2.37	
	6 Howrah „ 16, '94	2.21	Seasonable monsoon weather. Sowing of jute and paddy nearly finished. <i>Aus</i> seedlings thriving. Prospects of jute and sugarcane favourable. Prices continue normal. Common rice sells at—
	Ulubaria ...	3.41	
	7 24-Parganas „ 16, '94	2.76	Weather—hot and cloudy with occasional rain. Sowing of jute and <i>aus</i> completed. Rain has done much good to the plants. Condition of cattle good. Fodder and water sufficient. Rice sells at:—
PRESIDENCY DIVN.	8 Nadia „ 16, '94	4.02	Regular monsoon weather has set in. The prospects of the <i>bhadoi</i> paddy is excellent. Jute is also promising. Rice selling at 12 to 12½ seers per rupee.
	Meherpur ...	4.25	
	Ranaghat ...	2.93	Weather—hot and cloudy and the latter part is windy and rainy. The rain of the week has done much good to the paddy and indigo plants. Jute is being sown. Plantation of sugarcane going on. No want of fodder. No cattle-disease reported. Common rice sells at 13 seers per rupee. Prices continue normal.
	9 Murshidabad „ 16, '94	1.97	
	10 Jessore „ 16, '94	4.08	Weather—wet and cloudy. Ploughing and sowing completed. Prospects of standing crops good. Harvesting of <i>til</i> nearly finished. Fodder and water sufficient. Prices of common rice:—
	Jhenida ...	2.62	
	Magura ...	2.84	Sadar ... Srs. c. Jhenida ... 12 0 Magura ... 12 0 Narail ... 11 8 Bangaon ... 12 0 } per rupee. ... 10 to 13 0
	Narail ...	2.81	
	Bangaon ...	2.30	
	11 Khulna „ 16, '94	3.10	Weather—hot and rainy and cloudy. Cultivation of jute, <i>aus</i> and <i>aman</i> going on. Common rice sells from 11 seers 6 chitaks to 14 seers per rupee. Fodder sufficient. Water wanted in some places in Satkhira subdivision.
	Bagerhat ...	4.62	
	Satkhira ...	3.09	



No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concl'd.			
RAJSHAHY DIVN.	12 Rajshahi Nator Naugaon	June 16, '94 ... ... 0·82 2·71 0·61	Weather—rainy and normal. The rain of the week is doing much good to all crops which are reported to be in fair condition. Fodder and water-supply ample. There is no cattle-disease. Rice is selling from 11 to 14 seers per rupee.
	13 Dinapur Thakurgaon	„ 16, '94 ... 1·03 1·71	Weather—hot and occasionally cloudy. Cultivation of <i>haimanti</i> going on. More rain wanted. No outbreak of cattle-disease. Fodder and drinking water sufficient. Rice selling from 13 to 15 seers per rupee.
	14 Jalpaiguri	„ 16, '94 2·19	Weather—hot. Prospects of <i>bhadoi</i> rice and jute favourable. Common rice sells at 12 seers per rupee. Fodder and water sufficient. No cattle-disease reported.
	15 Darjeeling Siliguri	„ 16, '94 ... 5·71 8·07	Weather—seasonable. Damp and cloudy with breaks of sunshine. <i>In the hills</i> :— <i>Bhutta, shama, phaphur</i> , potatoes and <i>kangni</i> coming to maturity. <i>Marua, aghani dhan</i> and <i>bhadoi</i> progressing favourably. <i>In the Terai</i> :—Prospects of crops good. Late rain beneficial. Prices of coarse rice :— Srs. Hills ... 7 to 12 } Terai ... 12 to 13 } per rupee.
	16 Rangpur Nilphamari Kurigaon Gaibanda	„ 16, '94 ... ... ... 0·25 0·30 1·20 4·70	Weather—cloudy and warm. Jute is doing well. Harvesting of <i>aus</i> paddy is commencing. Transplantation of <i>aman</i> has begun. Price of common rice 10 to 12 seers per rupee.
	17 Bogra Sherpur	„ 16, '94 ... 2·95 3·64	Weather—hot and cloudy with occasional showers. Prospects of standing crops continue good. Common rice selling at 14 seers per rupee. Fodder and water sufficient.
	18 Pabna	„ 16, '94 0·81	Weather—cloudy and rainy with high southerly wind. Standing crops benefited by the rainfall. Common rice sells at 10½ to 13 seers per rupee in the Sirajganj sub-division and 12 seers per rupee in the Sadar subdivision.
	19 Dacca	„ 16, '94 1·92	Weather—cloudy and rainy. Harvesting of <i>boro</i> paddy completed. Jute and <i>bhadoi</i> paddy thriving. Prospect appears to be good. Common rice selling from 8 to 10 seers per rupee. Fodder available. There is want of drinking water in some places. No cattle-disease.
DACCA DIVN.	20 Mymensingh	„ 16, '94 1·85	Weather—hot with occasional showers. Prospects of standing crops good. Common rice sells at 10 to 11 seers per rupee. Condition of cattle good. Fodder and water available. The river has gone down during the week.
	21 Faridpur Goalundo Madaripur	„ 16, '94 ... ... 2·26 4·69 4·87	Weather—seasonable. Regular showers. Prospects of crops very good. Price of rice 12 seers per rupee. No cattle-disease. Fodder and water abundant.
	22 Backergunge Pirojur Patuakhali Bhola	„ 16, '94 ... ... ... 5·04 4·43 2·37 5·22	Weather—seasonable. State and prospects of crops fair. Ordinary rice sells from 10 to 12 seers per rupee. Fodder and water sufficient for cattle. Good drinking water is somewhat scarce in some parts of Pirojur and Patuakhali subdivisions.
CHITTAGONG DIVN.	23 Tippera	„ 16, '94 1·61	Rainfall much heavier than at Sadar—6·43 inches at Brahmanbaria, 5·05 at Chandpur. State and prospects of crops satisfactory. Price of rice almost stationary— Sadar— Chandina ... } 9 seers per rupee. Daudkandi ... } Laksham ... } 11 „ „ Srs. c. Chandpur— Matlab ... } 9 11 „ Hajiganj ... } 10 2 „ Brahmanbaria— Bancharampur ... } 11 seers „ Brahmanbaria ... } 8 „ „
	24 Noakhali	... ...	Report not received.
	25 Chittagong	„ 16, '94 9·86	Weather—cloudy with occasional showers and alternate sunshine <i>Pania aus</i> being harvested. Heavy rain has retarded ploughing in places. Prices steady. Water and fodder sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
26	Patna June 16, '94 Bihar ... Dinapore ...	0.25 0.16 0.24	Weather—cloudy. The recent rain is calculated to do much good to the standing crops and to the <i>bhadoi</i> crops which are now being sown. Millets are being harvested. Prices generally stationary. Common rice sells at— <div>Srs. Sadar ... .. 14½ Bihar ... .. 16 Dinapore ... .. 15½</div> per rupee.
27	Gaya „ 16, '94 Aurangabad ... Nawada ... Jahanabad ...	1.09 1.07 0.79 0.15	Weather—stormy and rainy. Harvesting of <i>cheena</i> continues. Sugarcane doing well. Sowing of <i>marua</i> and paddy going on. Prices somewhat above the normal. Common rice selling at— <div>Srs. Sadar ... .. 13½ Jahanabad ... .. 14 Aurangabad ... .. 14 Nawada ... .. 17</div> per rupee. Fodder-supply not quite sufficient.
28	Shahabad „ 16, '94 Buxar ... Bhabua ... Sasaram ...	0.83 2.03 0.01 1.28	Weather—showery and gusty. The rain has done good to sugarcane and will facilitate ploughing.
29	Saran „ 16, '94 Siwan ... Gopalganj ...	5.43 3.70 1.86	Weather—cloudy with strong east wind and occasional showers. The rainfall of the week has done good to the standing crops. <i>Bhadoi</i> sowings going on. Fodder and water plentiful. Prices of common rice:— <div>Srs. Chapra ... .. 13 Siwan ... .. 13½ Gopalganj ... .. 13</div> per rupee.
30	Champaran „ 16, '94	1.22	Weather—cloudy with showers of rain generally in the morning. Sowing of <i>bhadoi</i> crops and paddy progresses. Rain has done good to cultivation. Indigo doing well; prospects continue favourable. Price of common rice 14 seers per rupee. No cattle-disease.
31	Muzaffarpur „ 16, '94 Hajipur ... Sitamarhi ...	3.14 Nil 1.32	Weather—cloudy occasionally; east wind throughout. Rain has much benefited the standing crops. Sowing of <i>bhadoi</i> continues. Agricultural operations proceeding. No cattle-disease. Fodder and water sufficient. Common rice selling at 12 seers 12 chitaks per rupee.
32	Darbhanga „ 16, '94 Madhubani ... Samastipur ...	0.82 1.23 0.80	Weather—cloudy with high east wind occasionally. Rainfall of the week improved the prospects of the standing crops and also facilitated the preparation of land for <i>bhadoi</i> cultivation. More rain, however, still wanted. Fodder and water for cattle sufficient. Common rice selling at 13½ seers per rupee.
33	Monghyr „ 16, '94 Begusarai ... Jamui ...	1.65 3.23 0.09	Weather—hot and occasionally rainy and comparatively cooler with strong east wind. Ploughing going on. <i>Bhadoi</i> sowing commenced, but more rain is urgently needed. Indigo and sugarcane doing well. Fodder and water plentiful. No cattle-disease. Prices of common rice:— <div>Srs. Sadar ... .. 11 to 15 Begusarai ... .. 14 Jamui ... .. 15½</div> per rupee.
34	Bhagalpur „ 16, '94 Banka ... Madbipura ... Supul ...	2.48 1.32 1.65 1.26	Weather—cool for the time of year with clouds and showers. Rain has done good by allowing <i>bhadoi</i> paddy and <i>marua</i> to be sown. More rain is wanted in places. Prices normal. Price of common rice varies from 15½ to 16½ seers per rupee. Fodder and water sufficient.
35	Purnea „ 16, '94 Kishanganj ... Araria ...	2.42 1.63 2.34	Storms and sunshine alternately. Jute and <i>bhadoi</i> rice doing well, but backward, especially the former, which in the Sadar will be very poor. <i>Aghani</i> sowings progressing. Indigo very backward, but benefited by late rain. More rain much wanted. Prices continue rather high. Common rice at Sadar 15 seers per rupee.
BHAGALPUR DIVISION.			

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops																														
BIHAR—concl'd.																																	
BHAGALPUR DIVN.—concl'd.	36 Malda * June 16, '94	2.38	Weather—cloudy with occasional showers. Rain wanted in the Gazole thana. Harvesting of <i>boro</i> paddy not yet finished. Weeding of <i>bhadoi</i> rice continues. Lands are being prepared for late rice crop. Common rice selling at 14 to 18½ seers per rupee. Fodder and water ample.																														
	37 Sonthal Parganas „ 16, '94	2.52	Continual showers. Rains have apparently set in and sowing has begun. Sugarcane more or less spoilt. Indigo splendid. Price of rice 13 to 14 seers per rupee.																														
	Deoghur ...	2.94																															
	Jamtara ...	3.76																															
	Pakur ...	1.82																															
	Rajmahal ...	1.40																															
ORISSA.																																	
ORISSA DIVN.	38 Cuttack „ 16, '94	2.83	Weather—rainy. Rainfall more or less general in the district. Ploughing and sowing in progress. <i>Beali</i> and <i>sarad</i> above ground in places. Prices of common rice:— <table><tr><td>Sadar subdivision</td><td>...</td><td>Srs.</td><td>c.</td><td>Srs.</td><td>c.</td></tr><tr><td>Jajpur</td><td>...</td><td>10</td><td>8</td><td>12</td><td>8</td></tr><tr><td>Kendrapara</td><td>...</td><td>9</td><td>0</td><td>11</td><td>13</td></tr><tr><td>Banki</td><td>...</td><td>11</td><td>0</td><td>13</td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>14</td><td>0</td></tr></table> } per rupee.	Sadar subdivision	...	Srs.	c.	Srs.	c.	Jajpur	...	10	8	12	8	Kendrapara	...	9	0	11	13	Banki	...	11	0	13	0					14	0
	Sadar subdivision	...	Srs.	c.	Srs.	c.																											
	Jajpur	...	10	8	12	8																											
	Kendrapara	...	9	0	11	13																											
Banki	...	11	0	13	0																												
				14	0																												
39 Balasore „ 16, '94	2.33	Fodder and water-supply sufficient. Weather—close, cloudy, rain threatening. All sown lands and lands ready for ploughing much benefited by the rain. More rain expected. Prices of common rice:— <table><tr><td>Balasore</td><td>...</td><td>Srs.</td><td>15</td></tr><tr><td>Bhadrak</td><td>...</td><td>...</td><td>14</td></tr></table> } per rupee.	Balasore	...	Srs.	15	Bhadrak	...	...	14																							
Balasore	...	Srs.	15																														
Bhadrak	...	...	14																														
40 Puri „ 14, '94	0.87	In the extreme south of the district common rice sells at 10 seers per rupee.																															
Khurda ...	3.58	Weather—hot but cloudy with drizzling rain. Lands are being ploughed for the ensuing rice crop and in some places being sown. <i>Dalua</i> rice is being harvested. Miscellaneous crops doing well. Common rice sells from 13 to 16 seers per rupee.																															
CHOTA NAGPUR.																																	
South-West Frontier Agency.																																	
CHOTA NAGPUR DIVN.	41 Hazaribagh June 16, '94	2.83	Weather—stormy with heavy rain since the 14th. Ploughing and sowing in vigorous progress everywhere. Prospects of sugarcane good. Common rice selling at 13 to 14 seers per rupee. Fodder and water will now be abundant.																														
	Giridi ...	4.99																															
	42 Lohardaga „ 16, '94	3.86	Weather—hot and cloudy. Sowing of both upland and lowland paddy is vigorously carried on. Common rice selling at 14 seers per rupee. Fodder and water sufficient.																														
	43 Palamau „ 15, '94	1.0	Monsoon seems to have broken. Local storms during the week, the heaviest rain being in the southern parts. Ploughing is going on vigorously. <i>Bhadoi</i> and <i>goondli</i> paddy being sown in some places. Prospects favourable. Rice selling at 12 seers 7 chitaks to 18 seers per rupee. Fodder reported to be insufficient in Manata.																														
	44 Manbhum „ 16, '94	6.95	Heavy rain throughout the week. Ploughing going on everywhere. Further rain not required at present. Price of common rice 10 to 14 seers per rupee.																														
Gobindpur ...	3.28																																
45 Singhbhum „ 16, '94	3.72	Heavy rain. <i>Gora dhan</i> still being sown.																															

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The 20th June 1894.C. E. BUCKLAND,  
Secy. to the Govt. of Bengal.



PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS, FIREWOOD AND SALT IN THE  
HEAD-QUARTERS STATION BAZARS OF THE DISTRICTS OF BENGAL  
DURING THE FORTNIGHT ENDING THE  
15TH JUNE, 1894.

## PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN																	
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM ( <i>Sorghum Vulgare.</i> )					
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
BENGAL.																			
BURDWAN DIVISION.	1	Bardwan	16 0	16 0	13 8	...	...	...	12 0	12 0	9 12	15 8	15 0	11 4	...	...	...		
	2	Birbhum	12 0	13 8	12 0	...	...	...	12 0	12 0	10 8	15 0	15 0	12 12	...	...	...		
	3	Bankura	14 9	14 9	13 5	...	...	...	13 0	12 8	10 0	15 10	15 14	11 0	...	...	...		
	4	Midnapore	13 0	12 0	11 0	...	...	...	11 8	12 0	10 0	13 8	14 0	11 14	...	...	...		
	5	Hooghly	14 6	14 6	11 13	20 8	20 8	...	8 0	8 0	8 0	12 0	12 0	10 0	...	...	...		
	6	Howrah	...	...	...	...	...	...	10 0	10 0	9 5	12 5	12 5	10 8	...	...	...		
PRESIDENCY DIVISION.	7	24-Parganas	14 0	13 8	11 0	18 0	16 8	20 0	8 0	8 0	8 0	12 8	13 0	11 0	...	...	...		
	8	Calcutta	13 5	12 10	13 4	20 0	20 0	17 12	7 9	7 7	8 3	10 0	10 0	10 10	...	17 12	20 0		
	9	Nadia	18 8	18 8	14 8	22 14	22 8	...	6 8	6 8	8 12	12 12	12 12	11 0	...	...	...		
	10	Murshidabad	16 0	16 0	13 0	...	...	...	10 0	10 0	10 0	13 0	13 0	11 4	...	...	...		
	11	Jessore	10 0	11 0	10 0	...	...	...	9 0	10 0	9 8	12 0	13 0	11 0	...	...	...		
	12	Khulna	...	...	...	...	...	...	11 0	11 0	10 10	13 0	13 0	12 14	...	...	...		
RAJSHAH DIVISION.	13	Rajshahi	15 12	16 8	13 8	24 0	24 0	24 0	10 8	11 4	9 12	11 4	12 12	10 14	...	...	...		
	14	Dinajpur	14 4	13 9	13 3	...	...	...	8 6	11 4	9 6	13 13	14 5	12 0	...	...	...		
	15	Jalpaiguri	13 0	12 8	12 0	13 8	13 8	16 0	8 0	8 8	8 8	12 0	12 8	12 0	...	...	...		
	16	Darjeeling	8 0	8 0	8 0	9 0	9 0	9 0	5 8	5 0	5 8	12 0	11 0	9 8	...	...	...		
	17	Rangpur	15 2	15 0	12 0	...	...	...	10 2	8 9	8 14	11 13	13 13	11 0	...	...	...		
	18	Bogra	16 14	16 14	10 15	...	...	...	10 8	10 8	9 9	13 8	13 8	12 0	...	...	...		
DACCA DIVISION.	19	Pabna	20 4	20 4	17 10	22 8	22 8	22 8	6 2	6 2	6 0	12 0	12 0	11 10	...	...	...		
	20	Dacca	13 0	13 0	12 0	...	...	...	8 0	8 0	10 8	10 0	9 12	11 0	...	...	...		
	21	Mymensingh	9 8	9 8	9 8	...	...	...	9 0	10 0	10 0	10 0	11 0	11 0	...	...	...		
	22	Faridpur	16 0	16 8	17 0	16 0	20 0	20 0	7 0	7 4	7 0	12 0	12 0	10 8	...	...	...		
23	Backergunge	...	...	...	...	...	...	9 12	9 12	9 9	10 0	10 0	10 0	...	...	...			

- A In the subdivisions the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 10 seers 5 chitaks, and Raniganj 10½ seers.  
 B At Rampur Hat the retail price of salt is 11 seers per rupee.  
 C At Vishnupur the retail price of salt is 10 seers per rupee.  
 D In the subdivisions the retail prices of salt per rupee are :—Contai 8 seers, Tamluk 10½ seers and Ghatal 10 seers 7 chitaks.  
 E In the subdivisions the retail prices of salt per rupee are :—Bhadreswar 11 seers and Jahanabad 10 seers.  
 F At Ulubaria the retail price of salt is 10½ seers per rupee.  
 G In the marts in the interior of the district the retail prices of salt per rupee are :—Chetla 10 seers 10½ chitaks, Magra Hat 9 seers 2 chitaks, Baduria 10 seers 10 chitaks.  
 H In the subdivisions the retail prices of salt per rupee are :—Kushtia 10½ seers, Chuadanga 10 seers, Meherpur 10 seers and Ranaghat 10 seers.  
 I In the subdivisions the retail prices of salt per rupee are :—Kandi 10 seers 5 chitaks and Jangipur 10 seers 4 chitaks.  
 J In the subdivisions the retail prices of salt per rupee are :—Jhenida 9 seers, Magura 9½ seers, Narail 9½ seers, and Bangaon 10 seers.

SEERS OF 80 TOLAHS.

BAJRA OR CUMBU. ( <i>Pennisetum typhoides</i> .)			MARUA OR RAGI. ( <i>Eleusine Corocana</i> .)		
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.

S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
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...	16 0	...	...	...	...
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...	...	...	13 0	14 0	11 0
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...	...	...	...	...	...



KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)			GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. ( <i>Cicer arietinum</i> .)		
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.

S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
...	...	...	...	16	0	16	0	18	0		
...	...	...	...	12	12	16	8	18	0		
...	...	...	...	17	10	17	10	16	0		
...	...	...	...	16	0	16	0	14	8		
...	...	...	...	16	0	16	0	12	4		
...	...	...	...	...	...	...	...	...	...		

8	0	8	0	6	0	20	0	20	0	20	0
8	6	8	0	8	0	18	4	18	13	16	0
...	...	...	...	20	8	20	8	21	4		
...	...	...	...	18	0	18	0	20	0		
...	...	...	...	16	0	16	0	15	0		
...	...	...	...	11	8	11	0	11	0		

...	...	...	...	20	4	20	4	19	8		
...	...	...	...	13	2	13	12	15	0		
...	...	...	...	14	0	14	0	16	0		
...	...	...	...	12	0	12	0	11	0		
...	...	...	...	14	10	13	1	13	0		
...	...	...	...	13	5	13	5	13	5		
...	...	...	...	17	0	17	0	17	0		

...	...	...	...	14	8	14	8	14	0		
...	...	...	...	12	8	12	8	12	8		
...	...	...	...	10	8	13	4	11	0		
...	...	...	...	13	8	13	8	13	4		

## Head-quarters Station Bazars of the Districts of Bengal on the 15th June, 1894.

												WHOLESALE PRICES PER MAUND OF 40 SEERS.			DISTRICTS.	Number.
INDIAN CORN OR MAIZE. (Zea Mays.)			ARHAR OR THUR, CADJAN -PEA. (Cajanus Indicus.)			FIREWOOD.			SALT.			SALT.				
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
...	...	...	12 0	12 0	23 0	80 0	80 0	106 0	10 8	11 10	3 9 0	3 10 0	3 6 0	Burdwan.	1	
...	...	...	12 0	13 8	20 0	160 0	200 0	200 0	11 0	11 0	3 10 6	3 10 6	3 10 6	Birbhum.	2	
...	...	...	13 5	13 5	11 0	320 0	320 0	320 0	10 8	10 8	3 13 0	3 13 0	3 13 0	Bankura.	3	
...	...	...	16 0	16 0	19 0	200 0	220 0	240 0	10 8	11 7	3 9 0	3 11 0	3 7 0	Midnapore.	4	
...	...	...	13 0	13 0	13 5	160 0	160 0	120 0	10 0	10 0	4 0 0	4 0 0	3 6 0	Hooghly.	5	
...	...	...	12 0	12 0	12 10	105 0	105 0	105 0	10 0	10 10	3 12 0	3 12 0	3 8 0	Howrah.	6	
...	...	...	18 0	18 0	21 0	100 0	100 0	100 0	10 8	11 0	3 6 0	3 6 0	3 6 0	24-Parganas	7	
...	20 0	20 0	15 3	16 0	20 0	85 0	94 0	85 0	11 13	11 6	3 6 0	3 8 0	3 13 0	Calcutta.	8	
...	...	...	18 0	18 0	23 12	128 0	128 0	128 0	10 0	10 8	3 8 0	3 10 0	3 12 0	Nadia	9	
...	...	...	18 0	19 0	20 0	200 0	200 0	200 0	10 5	10 8	3 9 0	3 8 0	3 7 0	Murshidabad.	10	
...	...	...	16 0	18 0	20 0	120 0	120 0	120 0	9 2	9 2	4 0 0	4 0 0	3 10 0	Jessore.	11	
...	...	...	11 0	11 0	11 0	160 0	160 0	160 0	9 0	10 8	4 0 0	4 0 0	3 12 0	Khulna.	12	
...	...	...	20 5	20 2	21 8	240 0	240 0	240 0	9 9	9 9	4 0 0	4 0 0	3 10 9	Rajshahi.	13	
...	...	...	...	...	...	120 0	120 0	160 0	10 0	10 8	4 0 0	4 0 0	3 12 0	Dinajpur.	14	
...	...	...	11 0	10 0	9 0	160 0	160 0	200 0	9 8	9 8	4 0 0	4 0 0	4 0 0	Jalpaiguri.	15	
20 0	20 0	11 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	4 13 0	4 12 0	4 10 0	Darjeeling.	16	
...	...	...	11 4	13 13	8 0	72 0	70 0	120 0	10 2	9 0	3 12 0	4 0 0	4 0 0	Rangpur.	17	
...	...	...	...	...	...	90 0	90 0	90 0	8 13	8 13	4 2 8	4 2 8	4 10 8	Bogra.	18	
...	...	...	20 0	18 12	22 8	200 0	200 0	200 0	9 12	9 12	3 11 0	3 12 0	3 10 0	Pabna.	19	
...	...	...	...	...	...	120 0	120 0	120 0	8 0	8 0	4 0 0	4 0 0	3 9 0	Dacca.	20	
...	...	...	13 0	13 0	13 0	120 0	120 0	120 0	8 0	8 0	4 0 0	4 0 0	4 0 0	Mymensingh.	21	
...	...	...	...	...	...	120 0	...	10 0	9 8	10 4	4 4 0	4 3 0	3 14 0	Faridpur.	22	
...	...	...	11 6	11 6	...	80 0	80 0	80 0	10 0	10 10	4 0 0	4 0 0	3 12 0	Backergunge.	23	

K In the subdivisions the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 10½ seers.

L In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 8 seers 10 chitaks.

M At Silliguri the retail price of salt is 9 seers per rupee.

N In the subdivisions the retail prices of salt per rupee are :—Gaibanda 10 seers, Nilphamari 9 seers and Kurigaon 8 seers.

O At Sirajganj the retail price of salt is 10½ seers per rupee.

P In the marts in the interior of the district the retail prices of salt per rupee are :—Madanganj 11 seers 6 chitaks, Manikganj 9½ seers, Mirkadinhat 10 seers and Munshirhat 10 seers.

Q In the subdivisions the retail prices of salt per rupee are :—Kagmari 10 seers, Netrakona 8 seers, Kishorganj 10 seers and Jamalpur 8½ seers.

R In the subdivisions the retail prices of salt per rupee are :—Madaripur 9½ seers and Goalundo 10 seers.

S In the subdivisions the retail prices of salt per rupee are :—Pirojpur 8 seers, Patuakhali 9 seers, and Bhola 8 seers.

## PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

		QUANTITIES PER RUPEE IN														
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLU, (Sorghum Vulgare.)		
Number.	DISTRICTS.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL—continued.																
CHITTAGONG DIVISION.	24 Tippera ...	S. Ch. 9 0	S. Ch. 9 0	S. Ch. 11 0	...	...	...	S. Ch. 9 0	S. Ch. 9 0	S. Ch. 8 0	S. Ch. 9 4	S. Ch. 9 8	S. Ch. 10 12	...	...	...
	25 Noakhali ...	...	...	...	...	...	...	S. Ch. 8 0	S. Ch. 8 8	S. Ch. 9 13	S. Ch. 9 8	S. Ch. 9 8	S. Ch. 11 8	...	...	...
	26 Chittagong ...	10 8	11 0	10 0	...	...	...	11 0	11 0	10 8	12 8	12 4	12 0	...	...	...
BIHAR.																
PATNA DIVISION.	27 Patna ...	18 4	Red. 19 0	16 0	25 0	25 0	19 0	10 0	10 0	10 0	14 8	14 8	15 8	22 0	22 0	23 0
	28 Gaya ...	16 0	White. 17 0	14 0	18 4	22 0	20 0	9 8	9 4	9 8	14 8	15 0	13 4	13 4	17 12	20 0
	29 Shahabad ...	14 0	14 0	13 0	18 0	20 0	18 0	8 0	8 0	8 0	12 0	12 0	13 0	...	...	...
	30 Saran ...	14 8	16 8	14 0	21 0	22 0	20 8	11 0	10 0	9 0	13 0	13 0	13 4	...	...	...
	31 Champaran ...	15 12	16 0	13 0	23 4	24 8	22 8	8 8	8 8	8 8	14 0	14 8	13 8	...	...	...
	32 Muzaffarpur ...	14 8	14 0	14 0	20 0	20 0	19 0	8 0	8 0	8 0	12 12	13 0	13 0	...	...	...
33 Darbhanga ...	17 8	17 8	13 3	22 0	22 0	18 11	11 8	12 4	11 0	13 0	13 12	14 0	...	...	...	
BHAGALPUR DIVISION.	34 Monghyr ...	16 12	16 12	14 8	16 13	21 0	21 0	9 8	9 7	8 0	13 10	14 2	12 0	12 10	...	17
	35 Bhagalpur ...	17 11	18 14	16 2	17 14	22 4	23 0	12 10	12 10	10 0	14 0	15 2	13 14	...	...	...
	36 Purnea (Kasba) ...	22 0	20 0	14 0	...	...	...	12 8	12 0	10 0	16 0	15 0	12 0	...	...	...
	37 Malda (English Bazar) ...	16 0	16 0	14 0	...	...	...	10 0	10 0	10 0	14 0	15 0	12 8	...	...	...
	38 Sonthal Parganas. ...	13 8	13 8	11 0	...	...	...	12 0	12 0	11 0	15 0	15 0	14 0	...	...	...
ORISSA.																
ORISSA DIVISION.	39 Cuttaek ...	13 2	13 2	13 2	...	...	...	10 8	10 8	10 8	12 8	13 2	13 2	...	...	...
	40 Balasore ...	16 0	14 0	11 0	8 0	8 0	10 0	11 0	11 0	10 0	15 0	16 0	13 0	...	...	...
	41 Puri ...	14 6	13 0	10 8	...	...	...	7 8	6 9	8 0	14 7	14 7	13 2	...	...	...
CHOTA NAGPUR.																
CHOTA NAGPUR DIVISION.	42 Hazaribagh ...	12 0	12 8	12 0	16 0	16 0	16 0	7 0	8 0	7 0	13 12	14 8	12 0	...	...	...
	43 Lohardaga (Ranchi) ...	10 0	10 0	11 8	12 0	10 0	16 0	12 0	12 0	10 0	15 0	14 0	12 0	...	...	...
	44 Palamau ...	7 4	7 4	9 0	12 0	...	...	10 2	11 4	11 4	12 6	12 15	13 8	...	...	...
	45 Manbhum ...	14 1	14 10	14 10	...	...	...	9 8	9 0	11 0	13 0	14 0	12 0	...	...	...
	46 Singhbhum ...	14 8	14 8	13 0	16 0	16 0	...	10 8	10 0	8 0	15 0	14 8	13 0	...	...	...

T In the subdivisions the retail prices of salt per rupee are :—Brahmanbaria 9 seers 2 chitaks and Chandpur 8 seers.

U At Fenny Hat the retail price of salt is 8 seers per rupee.

V At Cox's Bazar the retail price of salt is 8½ seers per rupee.

W In Bihar subdivision the retail price of salt is 9 seers per rupee.

X In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Aurangabad 9½ seers and Nawada 9 seers.

Y In the interior the retail prices of salt per rupee are :—Buxar 10 seers, Sasaram 9½ seers and Bhabhua 9½ seers.

Z In the subdivisions the retail prices of salt per rupee are :—Siwan 10 seers 6 chitaks, Gopalganj (Mirganj) not reported.

a At Bettiah the retail price of salt is 10 seers per rupee.

b In the subdivisions the retail prices of salt per rupee are :—Hajipur 10 seers and Sitamarhi 10 seers.

CALCUTTA,

The 19th June, 1894.



ERS OF 80 TOLAHS.

MAJRA OR CUMBU.  
*Emmiserum typhoidum.*

MARUA OR RAGI.  
*(Eleusine Corocana.)*

Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.
-----------------------------	-----------------------------------------	-----------------	-----------------------------	-----------------------------------------

h. S. Ch. S. Ch. S. Ch. S. Ch. S. Ch.

...	...	...	...	...
...	...	...	...	...
...	...	...	...	...

...	...	...	...	...
...	...	...	...	...
...	...	...	...	...
...	...	20 0	...	20 0
...	...	...	...	...
...	...	...	...	...
...	...	22 0	22 0	21 8

...	...	...	...	...
20 3	...	...	...	...
...	...	...	...	...
...	...	...	...	...
...	...	...	...	...

...	...	...	...	...
...	...	...	...	...
...	...	...	...	...

...	...	21 0	23 0	22 0
...	...	29 0	28 0	25 0
...	...	...	...	...
...	...	...	...	...
...	...	...	...	...

KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)			GRAM, CHHOLA, KAKUN OR SUNA ( <i>Cicer ariet</i>		
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	
...	...	...	13 0	13 0	
...	...	...	11 8	12 0	
...	...	...	11 8	12 4	
16 0	16 0	22 0	21 0	22 0	
10 4	11 0	14 0	20 0	20 4	
...	...	...	20 0	20 0	
16 0	15 0	16 0	20 0	20 8	
...	...	...	21 0	22 8	
...	...	...	19 0	19 0	
...	...	...	20 12	20 12	
12 10	12 9	16 8	20 8	21 0 to 22 0	
...	...	...	17 10	20 3	
...	...	...	17 0	18 0	
13 0	13 0	13 0	16 0	16 0	
...	...	...	16 0	16 0	
...	...	...	13 13	15 12 Chhola	
...	...	...	12 0	12 0 Biri or K...	
...	...	...	16 0	16 0	
...	...	...	14 7	14 7	
...	...	...	15 8	16 0	
...	...	...	12 0 to 13 0	12 0	
...	...	...	14 10 16 0	15 3	
...	...	...	17 0 to 12 0	17 0	
...	...	...	12 0	12 0	

## Station Bazars of the Districts of Bengal on the 15th June, 1894—(concluded).

															WHOLESALE PRICES PER MAUND OF 40 SEERS.								Number.
INDIAN-CORN OR MAIZE (Zea Mays.)			ARHAR OR THUR, CADJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			SALT.						DISTRICTS.					
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.									
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.	BENGAL—continued.		CHITTAGONG DIVISION.			
...	...	...	6 0	6 0	11 4	...	...	...	T 8 0	8 0	10 13	4 2 0	4 2 0	3 12 0	Tippahra	24							
...	...	...	...	...	...	...	...	...	U 9 0	8 8	9 6	4 6 0	4 8 0	4 0 0	Noakhali	25							
...	...	...	...	...	...	80 0	80 0	106 0	V 10 0	10 0	10 0	3 12 0	3 14 0	4 0 0	Chittagong.	26							
																			BIHAR.		PATNA DIVISION.		
19 0	21 0	21 0	24 0	24 0	23 0	130 0	130 0	130 0	W 10 8	11 0	11 4	3 10 0	3 10 0	3 10 0	Patna.	27							
...	...	...	19 0	22 0	20 0	120 0	120 0	160 0	X 10 0	10 0	9 12	3 14 0	3 14 0	3 13 0	Gaya.	28							
16 0	16 0	20 0	20 0	20 0	20 0	130 0	140 0	160 0	Y 10 0	10 0	10 0	4 0 0	4 0 0	4 0 0	Shahabad.	29							
19 0	19 8	19 8	20 0	21 0	21 8	160 0	160 0	180 0	Z 10 0	10 8	10 4	3 12 0	3 12 0	3 12 0	Saran.	30							
17 10	17 0	20 4	28 0	24 0	20 0	180 0	180 0	160 0	a 10 8	10 8	10 8	3 12 0	3 12 0	3 13 0	Champaran.	31							
16 8	16 8	19 0	19 0	19 0	21 0	160 0	160 0	160 0	b 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur.	32							
20 12	20 12	20 12	19 0	19 12	21 8	176 0	176 0	176 0	c 11 0	11 0	10 4	3 8 0	3 8 0	3 13 0	Darbhanga.	33							
(New.) 14 0	17 5	21 0 to 23 0	17 14	16 12 to 18 14	19 0 to 21 0	126 0 to 168 0	147 0 to 168 0	160 0	d 10 12	10 8	10 8 to 11 0	3 9 0	3 9 6	3 7 0	Monghyr.	34							
...	20 3	22 11	18 4	17 10	20 3	138 0	126 9	126 0	e 10 1	10 10	10 11	4 0 0	3 12 0	3 9 6	Bhagalpur.	35							
...	...	...	20 0	16 0	16 0	320 0	320 0	320 0	f 10 0	10 0	10 0	3 10 6	3 10 6	3 10 0	Purnea (Kasba).	36							
...	...	...	12 0	13 0	11 0	100 0	100 0	160 0	g 10 0	9 8	10 0	4 0 0	...	...	Malda (English Bazar).	37							
17 0	18 0	19 0	18 0	19 0	23 0	130 0	130 0	200 0	h 10 0	10 0	10 8	3 12 0	3 12 0	3 10 3	Sonthal Parganas.	38							
																			ORISSA.		ORISSA DIVI- SION.		
...	...	...	15 12	17 1	18 6	80 0	80 0	80 0	i 9 4	9 0	10 12	3 12 0	3 12 0	3 8 0	Cuttack.	39							
...	...	...	11 0	11 0	10 12	130 0	130 0	160 0	8 10 8	10 8	11 0	3 12 0	3 12 0	3 10 0	Balasore.	40							
...	...	...	14 7	14 7	17 2	80 0	80 0	80 0	11 0	11 0	11 0	3 8 0	3 8 0	3 8 0	Puri.	41							
																			CHOTA NAGPUR.		CHOTA NAGPUR DIVISION.		
16 0	16 0	16 0	16 0	16 0	16 0	240 0	240 0	240 0	j 8 0	8 0	9 0	4 7 0	4 7 6	4 8 0	Hazaribagh.	42							
17 0	16 0	16 0	10 0 Big. Small. 16 0	10 0 10 0 14 0	13 0 19 0	160 0	160 0	160 0	9 0	8 12	9 4	4 6 0	4 8 0	4 2 0	Lohardaga. (Ranchi).	43							
...	...	...	15 3	15 3	33 10	...	...	...	7 14	7 14	8 7	...	...	...	Palamau.	44							
24 0	24 0	18 0	17 0	...	17 0	...	...	...	10 10	10 0	10 10	4 0 0	4 0 0	3 11 0	Manbhum.	45							
...	...	...	12 0	2 0	13 0	100 0	100 0	100 0	8 0	8 0	9 0	4 6 0	4 6 0	4 6 0	Singbhum.	46							

c In the subdivisions the retail prices of salt per rupee are :—Madhubani 10 seers and Samastipur 10 seers.

d In the subdivisions the retail prices of salt per rupee are :—Begusarai 10 seers and Jamui 10 seers.

e In the subdivisions the retail prices of salt per rupee are :—Banka 9 seers 6 chitaks, Madhipura 9 seers and Supaul 10 seers.

f In the subdivisions the retail prices of salt per rupee are :—Kishanganj 10 seers and Araria (Basantpur) 9 seers.

g In the subdivisions the retail prices of salt per rupee are :—Deoghur 10½ seers, Godda 9 seers, Pakur 10½ seers, Rajmahal 10 seers ; Jamtara not reported.

h In the subdivisions the retail prices of salt per rupee are :—Jajpur 8 seers, Kendrapara 9 seers, and Banki 11 seers.

i At Bhadrak the retail price of salt is 9 seers per rupee.

j At Giridih the retail price of salt is 10½ seers per rupee.

Published for general information.

C. E. BUCKLAND,  
Secretary to the Govt. of Bengal.



*PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt*

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 0 0	3 2 0	3 0 0	2 0 0	2 0 0	2 4 6	5 4 0	5 6 0	4 14 0	4 0 0	4 0 0	3 12 0
2	Sirajganj ...	2 10 0	2 10 0	2 12 0	...	...	...	5 6 0	5 8 0	6 5 0	3 6 0	3 8 0	4 0 0
3	Dacca ...	3 0 0	3 0 0	3 4 0	...	...	...	5 0 0	5 0 0	3 12 0	4 0 0	4 0 0	3 8 0
4	Narayanganj ...	...	...	...	...	...	...	4 6 0	4 8 0	4 0 0	4 0 0	4 0 0	3 10
5	Chittagong ...	3 8 0	3 8 0	4 0 0	...	...	...	3 6 0	3 6 0	3 12 0	3 0 0	3 2 0	3 8 0
6	Patna ...	2 2 3	Red. 2 1 0	2 8 0	1 9 0	1 9 6	2 1 6	3 14 0	3 14 9	4 0 0	2 10 6	2 10 6	2 9 9
		2 7 0	White. 2 5 6	2 14 0									
7	Cuttack ...	3 0 0	3 0 0	3 0 0	...	...	...	3 10 0	3 10 0	3 10 0	3 0 0	3 0 0	3 0 0
8	Balasore ...	2 8 0	2 12 0	3 12 0	4 12 0	4 12 0	3 12 0	3 8 0	3 8 0	3 12 0	2 10 0	2 8 0	3 0 0
9	Puri ...	2 12 0	3 0 0	3 12 0	...	...	...	5 5 0	5 12 0	5 0 0	2 11 0	2 11 0	3 0 0

CALCUTTA,  
The 19th June, 1894.

PRICES PER MAUND					
JOWAR OR CHOLUM. ( <i>Sorghum Vulgare</i> .)			BAJRA OR CUMBU. ( <i>Pennisetum typhoides</i> .)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.
...	2 4 0 2 0 0	...	2 8 0	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
1 12 0 1 12 0 1 11 9	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

OF 40 SEERS.

MARUA OR FAGI. ( <i>Eleusine Corocana</i> .)			KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
...	...	...	4 12 05	0 05	0 00
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	2 7 02	6 01	13 0
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...



in the undermentioned Marts of Bengal on the 15th June, 1894.

GRAM, CHANA, CHHOLA KADALAY OR SUNAGA. (Cicer Arietinum.)			INDIAN-CORN OR MAIZE. (Zea Mays.)			ARHAR OR THUR, CADJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 3 0	2 2 0	2 8 0	...	2 0 0	2 0 0	2 10 0	2 8 0	2 0 0	0 6 9	0 6 9	0 7 0	3 6 0	3 8 0	3 13 0	Calcutta.
2 8 0	2 10 0	3 0 0	...	...	...	...	...	...	0 6 6	0 6 6	0 6 6	3 10 0	3 12 0	3 8 0	Sirajganj.
2 12 0	2 12 0	2 12 0	...	...	...	...	...	...	0 5 0	0 5 0	0 5 0	4 0 0	4 0 0	3 9 0	Dacca.
2 14 0	2 6 0	3 8 0	...	...	...	3 0 0	2 12 0	3 4 0	0 5 0	0 6 0	0 6 0	3 8 0	3 14 0	3 10 0	Narayanganj.
3 4 0	3 4 0	3 10 0	...	...	...	...	...	...	0 8 0	0 8 0	0 6 0	3 12 0	3 14 0	4 0 0	Chittagong.
1 13 0	1 12 0	1 14 6	2 1 0	1 14 0	1 14 6	1 9 6	1 9 6	1 11 9	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 10 0	Patna.
(Kalai) 2 13 0	2 8 0	2 0 0	...	...	...	2 8 0	2 6 0	2 2 0	0 8 0	0 8 0	0 8 0	3 12 0	3 12 0	3 8 0	Cuttack.
2 14 0	2 14 0	2 14 0	...	...	...	3 8 0	3 8 0	3 10 0	...	...	...	3 12 0	3 12 0	3 10 0	Balasore.
2 11 0	2 11 0	2 5 0	...	...	...	2 11 0	2 11 0	2 5 0	0 8 0	0 8 0	0 8 0	3 8 0	3 8 0	3 8 0	Puri.

C. E. BUCKLAND,  
Secretary to the Govt. of Bengal.

## Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.	DIVISION.	DISTRICT.	Representative station.	STATION OBSERVATIONS.											
				AIR PRESSURE.				WIND.		TEMPERATURE.					
				Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
SOUTH-WEST BENGAL.	Burdwan	Burdwan	Burdwan	29.479	29.523	+0.008	Variable	62	96.7	13th June	77.7	15th June	91.5	79.3	85.4
		Raniganj	Raniganj	29.242	29.523	-0.017	NE	68	96.2	13th "	76.8	11, 15 "	91.0	78.4	84.7
		Birbhum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Bankura	Bankura	29.245	29.490	-0.023	Calm	115	99.1	14th "	75.6	11th "	92.2	78.4	85.3
		Midnapore	Midnapore	29.435	29.529	-0.008	SE	113	97.8	14th "	75.1	14th "	92.2	77.8	85.0
		Hooghly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	Presidency	Howrah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		24-Parganas	Saugor Island	29.558	29.527	+0.011	S	377	90.7	10th "	77.0	15th "	88.1	79.9	84.1
		Calcutta	Calcutta	29.560	29.526	+0.009	Variable	96	93.6	13th "	76.2	16th "	89.8	77.0	83.9
		Nadia	Krishnagar	29.533	29.528	-0.021	ESE	131	94.8	14th "	76.2	11th "	90.2	78.1	84.2
		Murshidabad	Berhampore	29.526	29.541	+0.015	Variable	93	95.7	14th "	76.8	11, 15 "	91.6	78.3	85.0
		Jessore	Jessore	29.553	29.532	-0.008	SE	97	93.7	10th "	74.9	11th "	88.0	77.0	83.0
	Rajshahi	Khulna	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rajshahi		Rampur Boalia	29.522	29.541	-0.003	Calm	122	92.1	14th "	76.1	11th "	89.7	78.6	84.2	
Dinajpur		Dinajpur	29.499	29.572	+0.010	SEly	41	94.6	14th "	77.2	11th "	91.2	78.8	85.0	
Jalpaiguri		Jalpaiguri	29.564	29.604	+0.008	NE	91	92.9	11th "	76.1	11, 15 "	90.4	77.3	83.9	
Darjeeling		Darjeeling	29.877	—	+0.008	Variable	108	67.1	13th "	55.7	11th "	65.2	56.9	61.0	
Guatong		Guatong	—	—	—	SE & NW	107	68.8	10th "	38.6	11th "	57.5	42.1	49.8	
EAST BENGAL.	Dacca	Kuch Bihar	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Rangpur	Rangpur	29.506	29.552	-0.002	SE	54	93.3	14th "	77.2	13th "	90.7	78.3	84.5
		Bogra	Bogra	29.550	29.563	+0.014	ESE	68	90.7	16th "	76.7	11, 12 "	89.0	77.3	83.2
		Fabna	Sirajganj	29.564	29.563	-0.010	Variable	83	90.3	12th "	75.2	11th "	88.2	76.9	82.6
		Dacca	Narayanganj	29.579	29.547	-0.007	SE	221	91.1	11th "	75.2	11th "	87.5	77.8	82.6
		Mymensingh	Mymensingh	29.570	29.580	-0.013	ESE	111	90.2	16th "	75.4	10th "	87.8	77.0	82.4
	Chittagong	Faridpur	Faridpur	29.560	29.554	-0.028	SE	91	89.5	10th "	75.9	14th "	87.3	77.5	82.4
		Backergunge	Barisal	29.573	29.531	-0.046	Calm	113	90.8	11th "	75.4	14th "	86.1	77.3	81.7
		Tippera	Comilla	29.581	29.565	-0.021	E	165	91.3	11, 12 "	73.8	11th "	88.7	76.0	82.4
		Noakhali	Noakhali	29.568	29.558	-0.049	ESE	190	87.5	11, 12 "	75.3	11, 14 "	89.1	76.3	80.7
		Chittagong	Chittagong	29.535	29.568	-0.030	SE	201	88.2	11th "	73.1	11, 14 "	86.0	75.3	80.7
		South Lushai Hills	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
BIHAR.	Patna	Patna	Bankipore	29.389	29.522	+0.017	Variable	140	97.5	10th "	77.2	11th "	95.1	80.1	87.6
		Gaya	Gaya	29.188	29.509	+0.021	Variable	145	104.5	10th "	76.3	12th "	98.7	78.2	88.5
		Shahabad	Dehri*	29.243	29.542	+0.034	E	345	111.4	12th "	77.0	11, 16 "	96.8	79.0	88.0
		Shahabad	Buxar	29.335	29.526	+0.012	E	160	99.5	10, 13 "	74.8	11th "	95.2	78.0	86.6
		Arrah	Arrah	29.378	29.517	+0.008	Variable	78	98.4	10th "	75.5	11th "	95.0	79.4	87.2
		Saran	Chapra	29.410	29.543	+0.024	Variable	115	96.8	13th "	72.6	16th "	93.3	77.5	85.4
	Bhagalpur	Champanan	Motihari	29.370	29.549	+0.011	ENE	137	93.0	16th "	71.8	11th "	88.7	77.3	83.1
		Muzaffarpur	Muzaffarpur	29.411	29.541	—	ESE	134	97.7	12th "	77.2	11th "	92.6	79.6	86.1
		Darbhanga	Darbhanga	29.424	29.541	+0.020	ESE	152	96.5	13th "	76.2	11th "	91.7	79.5	85.6
		Monghyr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Bhagalpur	Bhagalpur	29.418	29.530	+0.006	SE	65	95.2	11, 13 "	76.5	11th "	93.2	78.8	85.9
		Purnea	Purnea	29.484	29.564	+0.030	E	122	95.2	13th "	72.2	14th "	91.1	77.9	84.5
ORISSA.	Malda	Malda	29.519	29.542	-0.008	SE	86	98.6	13th "	77.5	11th "	95.2	79.1	87.2	
	Sonthal Parganas	Naya Dumka	29.082	29.522	-0.005	SSE	157	96.1	13th "	76.3	11, 15 "	91.0	78.0	84.4	
	Cuttack	Cuttack	29.506	29.528	+0.005	SW	77	95.2	12th "	76.8	11th "	90.7	78.9	84.9	
	False Point	False Point	29.580	29.551	+0.007	W	253	95.0	14th "	75.1	15, 16 "	88.4	78.0	83.2	
	Balasore	Balasore	29.514	29.516	-0.017	Variable	142	96.9	14th "	73.8	14th "	92.1	77.6	84.9	
	Puri	Puri	29.577	29.532	—	SW	323	88.7	10, 14 "	77.6	11th "	87.0	80.0	83.5	
CHOTA NAGPUR.	Gopalpur	Gopalpur	Gopalpur	29.582	29.542	—	SSW	374	92.2	16th "	77.1	12th "	90.6	80.4	85.4
		Hazaribagh	Hazaribagh	27.576	29.502	-0.005	NWly	241	98.2	10th "	73.3	14-16 "	89.1	74.9	82.0
		Lohardaga	Ranchi	27.465	29.505	-0.022	Variable	191	94.0	10th "	69.9	13th "	87.3	72.5	79.9
		Palamau	Daltonganj	28.563	29.539	—	Variable	183	102.3	10th "	77.0	10th "	97.0	78.8	87.9
		Manbhum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Singbhum	Chaibassa	29.793	29.492	-0.024	Wly	42	97.4	13th "	75.7	16th "	92.0	78.1	85.1
	Sibsagar	Sibsagar	29.330	29.616	-0.004	Calm	—	94.7	15th "	74.0	11th "	91.1	76.8	84.0	
	ASAM.	Goalpara	Dhubri	29.526	29.595	+0.032	NE	131	91.2	11, 12 "	77.1	11th "	89.6	78.0	83.8
Cachar		Silchar	29.542	29.596	-0.012	Calm	—	96.6	16th "	75.3	12th "	93.0	76.8	84.9	

\* Mean of six days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the mean at the same time or average of the rainfall in that district determined from the returns sent in by the subdivisions stations for the period in question stations in the district sending in returns divided by the number of stations. A rainy day is one of which at least a tenth of an inch fell.





## Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 16th of June 1894.

Meteorological division.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1894.	Average rainfall from 16th May to date.
				Sunday, 10th.	Monday, 11th.	Tuesday, 12th.	Wednesday, 13th.	Thursday, 14th.	Friday, 15th.	Saturday, 16th.							
SOUTH-WEST BENGAL.	Burdwan.	Burdwan ...	Kalna ...	...	0.42	...	...	1.60	1.18	0.12	4	3.32	2.72	5.33	5.05	6.53	7.25
			Burdwan ...	...	0.20	...	...	0.28	0.71	0.11	4	1.39	1.48	4.69	3.32	5.21	6.01
			Katwa ...	...	...	...	...	0.90	0.85	0.52	4	2.27	2.36	4.79	5.37	5.45	8.22
			Raniganj ...	...	0.19	...	...	0.03	1.26	0.10	3	1.58	1.78	3.83	3.25	3.83	5.15
			Mankur ...	...	1.22	...	...	0.79	2.07	...	3	4.08	4.91	...	...	4.91	...
		Birbhum ...	Suri ...	...	1.04	...	...	0.10	2.49	0.16	4	3.59	2.61	7.51	4.30	7.51	6.49
			Hetampur ...	...	1.25	...	...	0.23	1.71	0.20	4	3.39	3.38	8.19	5.76	8.19	7.25
			Rampur Hat ...	...	...	...	...	1.91	0.48	1.75	4	4.14	2.87	6.61	4.87	6.61	6.94
			Bolpur ...	...	0.03	...	...	0.22	1.09	0.21	3	1.51	...	6.56	...	6.56	...
			Murari ...	...	0.75	...	...	...	0.20	0.06	2	1.01	...	1.91	...	1.91	...
		Bankura ...	Labpur ...	...	2.54	...	...	0.38	1.35	0.24	4	4.51	...	5.78	...	5.78	...
			Bankura ...	...	0.04	...	...	0.05	3.05	0.07	1	3.21	2.04	3.96	4.49	3.96	6.59
			Vishnupur ...	...	2.36	...	...	0.63	3.75	0.44	1	7.18	2.28	10.46	4.77	10.46	7.04
			Maliara ...	...	0.05	...	...	0.10	1.04	0.07	2	1.26	2.23	3.90	4.32	3.90	6.10
			Khatra ...	...	0.62	0.45	...	1.41	3.61	1.01	5	7.10	2.76	7.72	4.66	7.72	6.38
		Midnapore ...	Indas ...	...	2.05	...	...	0.17	2.75	0.23	4	5.25	...	5.65	...	5.65	...
			Kotalpur ...	...	1.00	...	...	1.45	2.23	0.50	4	5.18	...	6.92	...	6.92	...
			Onda ...	...	0.84	...	...	0.66	1.48	0.12	4	3.10	...	3.82	...	3.82	...
			Gangajalghat ...	...	2.95	...	...	0.16	1.57	...	3	4.68	...	6.17	...	6.17	...
			Kaipur ...	...	...	0.92	...	0.99	2.72	1.03	4	5.66	...	7.08	...	7.08	...
		Hooghly ...	Sonamukhi ...	...	...	...	...	0.86	1.50	0.18	3	2.54	...	3.84	...	3.84	...
			Contai ...	...	...	...	1.34	3.31	2.65	1.26	4	8.56	1.87	11.33	4.20	11.33	6.20
			Tamluk ...	...	1.56	0.05	0.10	1.50	1.56	0.63	4	5.20	1.57	7.01	4.20	7.01	5.83
			Midnapore ...	...	0.10	...	...	2.18	1.54	0.10	4	3.92	2.00	8.79	4.15	8.79	6.10
			Ghatal ...	...	0.96	0.05	...	1.41	2.94	0.27	4	5.63	2.41	7.03	5.36	7.03	7.00
		Howrah ...	Kakrahali ...	0.12	0.53	...	1.68	1.00	0.93	...	5	4.21	...	6.00	...	6.00	...
			Garkheta ...	...	5.05	0.38	...	0.67	5.16	0.23	5	11.49	...	12.67	...	12.67	...
			Panskura ...	...	0.87	...	...	1.87	2.18	0.34	4	5.26	...	7.29	...	7.29	...
			Dantoon ...	...	...	...	...	2.40	2.38	0.35	4	...	...	...	...	...	...
			Serampore ...	0.05	...	...	...	0.38	0.57	1.03	3	2.03	2.43	4.45	5.27	6.12	7.46
	PRESIDENCY.	24 Parganas...	Hooghly ...	...	...	...	...	1.14	1.25	0.59	3	2.98	2.31	5.67	4.59	5.88	7.31
			Jahanabad ...	...	2.87	...	...	1.00	1.29	0.49	4	5.65	2.10	6.71	4.59	6.71	6.94
			Howrah ...	...	0.40	...	0.28	0.34	1.00	0.19	5	2.21	2.55	2.84	4.89	3.19	7.20
			Mohesra ...	...	0.78	...	...	2.15	1.16	0.57	4	4.66	1.68	6.64	4.22	6.71	6.68
			Ulubaria ...	...	0.76	...	0.10	1.43	1.94	0.44	5	4.67	...	7.85	...	8.02	...
		Nadia ...	Saugor Island ...	...	0.13	1.15	...	0.25	1.94	0.25	5	4.42	2.03	7.01	4.31	7.01	6.72
			Diamond Harbour ...	...	1.35	0.64	...	1.64	...	1.62	4	5.25	1.76	6.78	3.81	7.03	5.84
			Canning Town ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			Alipore (Obay.) ...	...	0.10	...	0.82	2.22	2.50	0.25	5	5.89	...	7.87	...	7.87	...
			Barrackpore ...	...	0.28	...	0.36	0.32	1.46	0.34	5	2.76	2.16	3.80	4.92	7.37	...
		Murshidabad	Dum-Dum ...	...	...	...	...	0.15	0.96	1.05	3	2.16	2.59	4.61	5.66	5.66	7.48
			Barasat ...	...	...	...	...	0.44	0.75	0.35	3	1.54	2.62	3.43	5.03	5.77	8.04
			Basirhat ...	...	1.66	0.30	...	0.85	0.89	0.27	3	1.92	2.17	4.23	4.79	5.77	7.91
			Ranaghat ...	...	...	0.72	...	1.12	...	1.49	4	4.57	2.92	5.75	5.92	6.20	7.61
			Krishnagar ...	...	...	...	...	1.49	1.60	0.30	4	4.11	2.62	6.62	5.59	7.27	8.22
		Jessore ...	Chudanga ...	...	2.02	...	...	0.64	1.14	0.22	4	4.02	2.15	7.22	4.85	7.86	7.37
			Meherpur ...	...	1.42	...	...	1.67	0.74	0.32	4	4.15	2.83	7.86	5.34	8.37	9.97
			Kushtia ...	...	...	...	...	0.09	0.17	0.35	2	0.61	2.42	6.63	6.19	12.20	8.61
			Kandi ...	...	...	...	...	0.72	0.70	0.48	3	1.90	2.66	3.44	4.81	3.44	10.32
			Berhampore ...	...	0.77	...	...	0.48	0.95	0.37	4	1.97	2.91	3.65	4.96	3.44	7.39
	NORTH BENGAL.	Rajshahi ...	Lalbag ...	...	...	...	1.00	0.60	0.80	...	3	2.40	2.03	3.85	4.29	3.65	8.17
			Asimganj ...	...	...	...	...	0.15	0.96	1.05	3	2.16	2.59	4.61	5.66	5.66	7.76
			Jangipur ...	...	...	...	...	0.44	0.75	0.35	3	1.54	2.62	3.43	5.03	5.77	8.04
			Lakola ...	0.04	...	...	...	0.85	0.89	0.27	3	1.92	2.17	4.23	4.79	5.77	7.91
			Akhrikanj ...	...	0.10	...	...	1.12	...	1.49	4	4.57	2.92	5.75	5.92	6.20	7.61
		Khulna ...	Patkabari ...	...	0.05	...	...	0.25	0.20	0.06	2	0.56	...	3.92	...	4.02	...
			Narail ...	...	0.30	...	...	0.70	0.10	0.20	4	1.30	...	3.50	...	4.10	...
			Jessore ...	0.10	...	...	...	2.32	0.63	0.21	4	3.26	3.06	7.06	6.27	8.94	9.10
			Jhenidah ...	...	0.59	...	...	1.57	0.42	1.10	4	4.08	4.07	6.10	7.41	13.24	10.88
			Magura ...	...	0.21	...	...	1.04	1.15	0.10	4	2.50	3.60	4.59	7.61	5.95	11.08
		Dinajpur ...		Bangaon ...	...	0.50	0.05	...	0.85	1.37	0.15	4	2.92	2.58	5.15	5.46	5.83	10.64
			Satkhira ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			Bagerhat ...	1.33	...	0.41	0.14	2.40	0.81	0.24	3	3.45	3.66	4.49	5.91	6.19	8.95
			Khulna ...	0.90	...	...	...	1.44	0.40	0.52	6	4.43	3.36	6.95	7.24	7.67	10.45
			Nakipur ...	...	0.54	0.36	0.86	1.12	0.66	0.42	4	3.10	3.32	5.78	6.60	6.60	9.25
	RAJSHABI.	Rajshahi ...	Rompal ...	...	...	...	...	0.81	0.92	...	4	...	...	...	...	...	...
			Baulia ...	...	0.09	...	...	0.13	0.23	0.37	3	0.82	2.02	2.05	5.14	2.69	...
			Nator ...	...	...	...	...	0.16	...	0.07	1	0.23	2.96	3.13	5.35	5.02	8.20
			Naugaon ...	...	...	...	...	0.19	...	...	1	0.19	2.78	2.56	5.43	5.02	8.20
			Lalpur ...	...	...	...	...	0.43	0.24	0.22	3	0.89	...	2.81	...	3.70	9.22
		Dinajpur ...	Manda ...	...	...	...	...	0.19	...	0.05	1	0.24	...	3.68	...	6.13	...
			Mahadebpur ...	...	0.23	...	...	...	...	...	1	0.23	3.30	3.25	7.13	3.61	10.77
			Churaman ...	...	...	...	...	1.76	...	...	1	1.78	2.68	2.63	5.46	2.63	...
			Raiganj ...	...	0.05	...	...	0.25	0.39	0.22	3	0.91	3.38	5.75	5.75	8.63	9.47
			Dinajpur ...	0.25	0.18	...	...	...	0.17	0.43	4	1.03	5.08	5.39	8.08	5.39	12.77
	RAJSHABI.	Jalpaiguri ...	Balughat ...	...	...	...	...	0.05	0.22	...	1	0.27	2.89	5.05	5.73	6.81	11.05
			Thakurgaon ...	...	0.83	...	...	0.40	...	...	2	1.23	...	0.99	...	9.80	...
			Jalpaiguri ...	0.10	0.60	...	0.03	1.03	0.41	0.02	4	2.19	8.00	5.60	14.67	7.45	22.31
			Alipore Doar ...	...	0.09	...	...	0.79	2.12	...	3	5.05	...	13.51	...	25.83	...
			Falakotta ...	...	1.31	...	1.11	0.70	1.15	0.20	5	4.47	...	10.14	...	18	



## Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 16th of June 1894—concl'd.

Meteorological division.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain fall since 16th May 1894.	Average rainfall from 16th May to date.
				Sunday, 10th.	Monday, 11th.	Tuesday, 12th.	Wednesday, 13th.	Thursday, 14th.	Friday, 15th.	Saturday, 16th.							
Bihar—concluded.	Bhagalpur—concluded.	Bhagalpur ...	Madhipura ...	...	0'30	...	0'30	0'52	...	0'58	4	1'88	2'63	3'03	3'56	3'02	5'87
			Bangoon (Sy-fabad.)	...	...	...	...	...	0'48	0'40	2	0'88	?	1'20	?	1'20	?
			Supaul ...	...	0'20	...	0'06	0'70	0'25	0'07	3	1'28	3'20	2'83	4'18	2'83	6'42
			Pratapganj ...	...	...	...	3'50	...	0'35	...	2	3'85	?	7'48	?	7'48	?
			Bhagalpur ...	...	1'73	0'31	...	...	0'20	0'24	4	2'48	1'95	2'66	2'08	2'66	4'07
			Banka ...	...	...	...	...	...	0'50	0'30	3	2'12	1'29	2'12	2'44	2'12	4'19
			Colgong ...	0'24	0'86	...	...	...	0'11	0'10	4	1'31	?	1'70	?	1'70	?
		Purnea ...	Kishanganj ...	...	0'80	...	0'11	0'11	1'40	...	4	2'51	4'35	7'41	6'93	7'41	10'89
			Araria ...	...	0'90	...	0'85	0'07	2'01	...	3	3'83	3'46	6'18	4'89	?	?
			Purnea ...	0'10	0'74	...	0'60	0'12	0'55	0'41	6	2'42	3'43	4'48	5'17	4'48	8'10
Orissa.	Bhagalpur—concluded.		Gondwara (Korah).	0'70	...	0'13	0'48	0'01	0'36	...	4	1'68	?	2'90	?	3'19	?
			Barsoe	...	0'15	...	...	...	0'28	0'47	3	0'90	?	2'35	?	2'35	?
			Forbesganj ...	...	0'20	...	2'65	0'07	...	...	2	2'92	?	4'09	?	5'77	?
			Kaliaganj ...	0'70	...	...	...	0'27	...	0'18	3	1'15	?	6'06	?	7'39	?
		Malda ...	Malda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			Chanchal ...	...	...	...	...	1'73	0'58	0'07	2	2'38	2'83	5'67	4'87	5'87	7'32
			Gajoi ...	...	...	...	...	1'01	0'40	...	2	1'41	2'76	2'22	4'72	2'22	7'61
			Sibganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0'42	?	0'42	?
		Sonthal Par-ganas.	Rajmahal ...	0'65	0'20	...	...	...	0'13	0'05	3	1'03	2'28	2'86	3'77	2'86	6'55
			Godda ...	...	1'25	...	...	0'03	0'30	0'11	3	1'69	1'34	1'76	2'36	1'76	4'65
CHOTA NAGPUR.	Orissa.		Pikaur ...	...	...	...	...	0'27	...	0'12	2	0'39	2'77	2'40	4'84	4'59	7'84
			Naya Dumka	...	0'28	...	...	0'61	0'56	1'07	4	2'52	2'25	5'67	3'83	5'67	7'84
			Deoghur ...	0'05	2'36	...	...	0'17	2'62	0'31	4	5'51	2'15	7'46	3'31	7'46	5'06
			Jamtara ...	0'09	1'95	...	...	0'06	0'70	0'55	3	3'34	2'36	6'62	3'80	6'62	5'75
			Balibodda ...	0'93	...	...	...	...	0'94	...	2	1'87	?	?	?	?	?
			Nanihat ...	...	0'06	...	0'25	0'36	0'23	0'58	4	1'48	?	?	?	?	?
			Assenboni ...	...	...	...	...	0'40	0'30	...	...	...	?	?	?	?	?
			Katikund ...	...	...	...	...	...	1'45	1'90	2	3'35	?	?	?	?	?
			Madhupur ...	2'15	...	...	2'55	0'75	0'42	...	4	5'87	?	5'48	?	5'48	?
			Sarwan ...	2'30	...	...	0'40	1'50	0'25	0'24	5	2'39	?	4'69	?	4'80	?
CHOTA NAGPUR.	Orissa.		Sarath ...	...	1'85	...	...	0'25	1'41	0'67	4	4'18	?	5'67	?	5'73	?
			Barkope ...	...	0'40	...	2'08	...	0'10	...	3	2'58	?	?	?	?	?
			Danrey ...	0'65	...	...	...	...	...	...	...	...	?	?	?	?	?
			Bhagya ...	...	...	...	1'26	...	...	0'15	2	1'41	?	?	?	?	?
			Mohepore ...	...	...	...	...	...	0'56	0'26	2	0'82	?	?	?	?	?
			Barharwa ...	...	0'05	...	...	0'16	0'92	0'14	3	1'27	?	?	?	?	?
			Sahibganj ...	...	0'11	...	...	0'21	...	0'11	3	0'43	?	0'58	?	0'58	?
		Cuttack ...	Jagatsingpur	0'81	0'18	...	...	1'65	...	...	...	...	1'60	?	?	?	?
			Banki ...	...	0'28	0'09	0'29	...	0'41	...	...	...	1'86	?	2'22	?	3'63
			Cuttack ...	...	...	...	...	...	...	...	...	...	2'46	?	3'04	?	4'63
CHOTA NAGPUR.	Orissa.		False Point ...	0'03	1'92	0'23	...	0'63	1'21	1'22	5	5'24	6'26	2'42	6'26	6'26	6'90
			Kendrapara ...	0'24	0'28	0'13	...	0'45	1'86	0'75	6	3'71	1'96	5'08	3'58	5'08	4'73
			Jajpur ...	...	0'63	...	0'10	0'87	0'02	0'49	5	3'11	1'20	4'73	3'12	6'79	4'61
			Dharmasala	...	...	...	...	...	...	...	...	...	?	?	?	?	?
			Salipore ...	...	0'06	0'10	...	0'09	2'00	...	...	...	?	?	?	?	?
			Pal Lahara ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?
		Balasore ...	Akhyapada ...	...	0'17	...	0'46	0'24	1'26	0'16	5	2'29	?	3'65	?	4'89	?
			Chandbali ...	0'03	0'40	...	0'03	1'25	0'30	0'05	3	2'04	1'58	5'24	2'94	?	?
			Bhadrak ...	0'10	...	0'48	3'37	1'50	0'45	0'17	6	6'07	1'45	6'02	3'30	7'86	5'39
			Soro ...	...	...	...	2'00	0'48	...	...	2	2'48	1'13	2'68	2'44	?	6'38
CHOTA NAGPUR.	Chota Nagpur.		Balasore ...	...	...	...	0'25	0'98	1'10	...	3	2'33	1'73	2'35	3'18	3'02	5'46
			Jellapore ...	...	...	...	...	...	...	...	...	...	1'43	3'41	3'41	5'11	5'22
			Baripada ...	...	...	...	1'45	2'53	...	0'19	3	4'17	2'35	0'37	4'61	6'47	6'68
		Puri ...	Puri ...	...	0'33	0'12	...	...	0'66	...	3	1'11	1'42	1'60	2'40	1'60	3'95
			Khurda ...	...	0'33	1'36	0'13	...	0'13	...	...	...	1'75	3'01	3'01	5'11	5'11
			Bhanpur ...	0'86	...	2'10	...	...	...	...	...	...	1'89	3'65	3'65	4'38	4'38
			Gop ...	...	0'15	...	...	...	...	...	...	...	?	?	?	?	?
			Satpara ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?
			Pipli ...	0'39	...	...	...	...	0'94	...	...	...	?	?	?	?	?
			Nayagarh ...	...	...	0'18	...	0'49	...	...	...	...	?	?	?	?	?
CHOTA NAGPUR.	Chota Nagpur.		Ranpur ...	0'04	0'05	0'08	0'86	0'14	...	...	...	...	?	?	?	?	?
			Kurmala ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?
		Hazaribagh ...	Pachamba (Ghidh).	...	1'14	...	...	3'15	0'92	0'59	4	5'80	2'02	8'24	3'87	8'24	4'87
			Hazaribagh ...	0'03	0'54	...	0'12	0'50	0'81	1'06	5	3'06	1'79	3'35	2'85	3'35	4'38
			Semtagurh ...	...	...	...	...	...	...	...	...	...	2'27	3'26	3'26	4'77	4'77
			Mahudi Hills	...	...	...	...	...	...	...	...	...	2'44	3'51	3'51	4'94	4'94
			Jhumra Hill	...	...	...	...	...	...	...	...	...	1'68	?	?	?	?
			Barhi ...	0'42	...	...	...	1'37	...	1'02	3	2'81	?	3'05	?	3'05	4'16
			Chatra ...	...	...	...	...	0'43	0'46	1'32	3	2'21	?	2'46	?	2'46	?
			Karagdeha ...	...	...	...	...	0'90	0'65	...	2	1'55	?	?	?	?	?
CHOTA NAGPUR.	Chota Nagpur.		Ramgar ...	...	...	...	...	1'70	3'10	...	...	...	?	?	?	?	?
		Lohardaga ...	Lohardaga ...	0'59	...	0'33	...	2'52	1'64	0'66	...	...	1'50	?	?	?	?
			Ranchi ...	0'68	...	...	...	0'17	2'20	0'72	4	3'67	1'99	4'14	2'01	4'18	3'75
			Silli ...	...	...	...	0'60	1'50	1'60	...	...	...	?	?	?	?	?
			Palkot ...	...	...	...	...	...	...	...	3	3'70	?	4'00	?	?	?
			Tamar ...	...	...	...	1'40	0'33	2'53	1'20	4	5'46	?	7'30	?	?	?
			Chainpur ...	...	0'75	...	0'50	0'75	...	...	...	...	?	?	?	?	?
		Palamau ...	Palamau (Daltonganj).	...	...	...	1'30	1'09	1'27	0'95	4	4'61	?	4'08	?	?	?
			Balumath ...	...	...	...	...	1'70	0'33	...	...	...	?	?	?	?	?
			Husainabad ...	0'50	...	0'50	...	2'02	0'08	...	...	...	?	?	?	?	?
CHOTA NAGPUR.	Chota Nagpur.		Garhua ...	...	...	0'71	...	...	...	...	...	...	?	?	?	?	?
		Manbhum ...	Purnia ...	...	0'13	1'50	...	2'40	1'92	1'00	5	6'95	2'21	9'31	3'50	9'31	5'44
			Gobindpur ...	2'23	...	...	1'05	2'00	0'26	...	4	5'54	1'40	7'72	2'94	7'87	4'07
			Raghunathpur.	...	0'40	...	...	1'55	1'53	0'16	4	3'64	?	5'74	?	5'74	?
			Barabhum ...	...	0'10	...	...	0'85	4'00	0'25	4	5'20	?	7'77	?	7'77	?
			Jhalda ...	...	0'27	...	0'66	2'87	1'17	...	4	4'57	?	6'32	?	6'32	?
			Chas ...	...	...	...	...	0'10	0'50	...	2	0'60	?	2'30	?	2'30	?
			Pandra ...	...	2'55	...	...	...	1'75	0'61	3	4'91	?	8'34	?	?	?
		Singbhum ...															



**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING 8 A.M., SATUR-  
DAY, THE 16TH OF JUNE 1894.**

At the close of the previous week the monsoon current in the Bay of Bengal had been advancing steadily northwards, and had passed over Burma. It was also creeping up the east coast of the Bay, and may have been already beginning to affect slightly the south-eastern districts of Bengal and Assam, and on the last day of the week rather heavy and general rain had been reported in South-East Bengal. Over the remainder of Bengal conditions were a little disturbed, and local storms or nor'westers with rain were rather numerous. On the 10th of June, or the first day of the present week, conditions were to a great extent unchanged, except that an increase of pressure was reported at the north-western and north-eastern stations, while a fall was reported elsewhere. A slight low-pressure area existed on this day to the west of Orissa, and this gave rather disturbed weather on the 10th over that area and to the surrounding districts, and on the morning of the 11th, in addition to the fairly general rain which was falling in the east and north-east of the province, fairly general rain was also reported in the western and south-western districts, though the rain fell usually during thunderstorms. Pressure had also fallen in Orissa and at some of the South Bengal stations on the 11th, though elsewhere it had risen, and the pressure distribution was still a little irregular, as pressure was low in Orissa. On the 12th instant pressure fell rapidly over the whole province, the fall usually equalling an eighth of an inch, and a distinct low-pressure area commenced to develop in South-East Bengal and over the neighbouring parts of the Bay. At the same time the monsoon current in the Bay began to strengthen, and squally weather was reported in the north-east of the Bay. During the next 24 hours this depression concentrated and intensified very rapidly, and became a small cyclonic storm with a centre in the north-east angle of the Bay, not far from Chittagong. Pressure on the 13th had fallen at Chittagong by no less than 0.218", and the reading was only 29.353", or nearly a quarter of an inch below the normal. With the formation of the small storm weather became very squally over the north of the Bay, and rather strong winds set in from Akyab northwards. With the formation of the storm unsettled rainy weather also immediately commenced over practically the whole province. The small storm did not, however, remain stationary after its formation, but during the evening of the 13th it began to move in a north-westerly direction, filling up partially in its advance. On the morning of the 14th the small storm was very clearly defined between Jessore and Faridpur, and nearer the latter station than the former, but pressure on this day was only 0.15" below the normal at Jessore and 0.212" below it at Faridpur, so the small storm had filled up to a certain extent. In its advance inland it brought up with it a heavy wave of monsoon winds, and hence on the 14th rain was reported from practically all the stations in the province. On the 15th the small storm had moved away from the centre of the province, and a low-pressure area with an irregular cyclonic circulation of winds was indicated in the south of Chota Nagpur close to Chaibassa. This was clearly the same storm that had been near Faridpur on the 14th, and hence its line of advance must have been distinctly to the west of south, or almost west-south-westerly from the 14th to the 15th. This is a most unusual direction, and there are only a few cases on record where storms in the rains in India have moved in a decidedly southerly direction. In its movement across Bengal the storm again gave moderate to heavy general rain. On the 10th the small storm had again moved away in a westerly direction, and had ceased to affect the province, and in the rear of the storm pressure was rising very rapidly over the whole of Bengal. A moderate monsoon flowed in over the province after the storm, and again general rain was reported on the 16th.

Hence the principal features in the meteorology of the week have been the formation of the small storm in front of the advancing south-west monsoon current, and its advance in a westerly direction across the province. This storm has therefore clearly caused the setting in of the monsoon rains, which may be said to have commenced over the province on the 13th and 14th instant.

*Pressure.*—The mean pressure for the week has only varied from the normal by small amounts. At those stations which were directly affected by the small storm pressure has been slightly below the normal, but over the remainder of the province very slight excess pressures have usually been recorded. The variations are usually not more than two or three hundredths of an inch, and thus Chittagong shows a defect of 0.03", while Purnea and Dhubri show an equal excess.

*Temperature.*—The mean temperature for the week has been distinctly below the normal in all districts except North Bengal and Assam, where an excess of from 1° to 1.7° has been recorded. The defect in East Bengal has been small, having been rather less than a degree, but over the remainder of the province the defect has equalled about two to three degrees. For the whole of Bengal the temperature variation for the week has been a defect of 1.5°.

*Rainfall.*—Average falls of from two to four inches have been received in all divisions except North Bengal, which has received the small amount of 0.76 inch. The falls have been largely above the usual amounts in South-West Bengal, Orissa and Chota Nagpur, and about normal in Bihar, but in East and North Bengal large defects have been recorded, the fall in East Bengal only equalling about three-fifths of the usual amount, while in North Bengal the actual fall is only about a sixth of the normal.

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the week ending Saturday, the 16th of June 1894:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1894.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
South-West Bengal ...	95.3	76.4	90.6	78.3	84.5	-1.8	3.35	2.51	+0.84	3.65	2.78	+0.87	5.72	5.03	6.52	7.74
North Bengal ...	92.2	76.4	89.9	77.9	83.9	+1.0	0.76	4.51	-3.75	1.87	3.45	-1.58	5.07	8.79	7.96	14.10
East Bengal ...	89.8	74.9	86.9	76.7	81.8	-0.8	3.50	5.58	-2.08	3.92	3.97	-0.05	8.82	10.45	15.25	14.79
Bihar ...	98.8	75.5	93.7	78.6	86.2	-1.8	2.00	1.97	+0.03	2.88	1.97	+0.91	3.05	2.91	3.14	4.59
Orissa ...	93.6	76.1	89.8	79.0	84.4	-2.4	3.00	1.68	+1.32	3.70	2.30	+1.40	4.24	3.17	4.87	5.31
Chota Nagpur ...	96.2*	73.0*	89.5*	75.2*	82.3*	-3.4*	3.60	1.87	+1.73	4.00	2.54	+1.46	4.99	2.99	5.01	4.59
Assam ...	94.2	75.5	91.2	77.2	84.2	+1.7										

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 19th June 1894.

A. PEDLER,  
Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 10th to 16th June 1894.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1894.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
June	10th	29.738	84.2	90.0	11.7	78.3	79.6	76.0	.851	74.4	85	Nil
"	11th	.679	85.0	93.0	16.0	77.0	89.6	80.5	.919	76.7	66	0.46
"	12th	.580	86.4	94.8	16.8	78.0	88.1	80.5	.940	77.4	71	0.04
"	13th	.505	84.6	91.0	12.7	78.3	83.6	80.5	1.001	79.2	87	0.49
"	14th	.487	81.6	86.4	9.6	76.8	79.6	78.5	.962	78.1	95	0.35
"	15th	.470	83.1	89.5	12.9	76.6	81.1	79.8	1.002	79.3	94	1.45
"	16th	.590	83.0	88.0	10.0	78.0	86.1	81.5	1.014	79.7	81	0.04

The mean 10 A.M. pressure of the seven days ... 29.578  
Inches.

The mean temperature of the seven days ... 84.0

The extreme variation of temperature ... 18.2

The maximum temperature ... 94.8

The mean 10 A.M. relative humidity of the seven days ... 83  
%

The total fall of rain from 10th to 16th June 1894 ... 2.83  
Inches.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,  
The 18th June 1894.



Results of the Meteorological Observations taken at the Alipore Observatory from  
10th to 16th June 1894.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
1894.		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
June	10th	130.3	1.9	29.639	83.1	88.6	11.4	77.2	80.2	0.994	79.1	88	S by W and WSW	75	0.28	Chiefly cloudy, o, g, p, t.
"	11th	154.5	9.1	.623	84.2	91.9	14.4	77.5	79.6	.953	77.8	82	E and calm ...	72	Not measur-able.	Partially cloudy, d.
"	12th	154.0	7.5	.521	85.6	93.5	15.4	78.1	79.7	.939	77.3	78	NE and calm ...	58	0.36	Partially cloudy, o, t, p, d.
"	13th	137.7	0.6	.439	82.9	90.2	12.6	77.6	79.6	.969	78.3	86	SW by W and W by S.	59	0.26	Chiefly cloudy, o, g, p, t, <.
"	14th	125.8	Nil	.421	79.9	84.6	7.6	77.0	78.0	.936	77.2	92	W by S and WNW.	171	1.10	Cloudy, o, g, d, p, t.
"	15th	147.9	1.3	.444	82.1	87.4	11.0	76.4	79.3	.965	78.1	88	SW and S ...	116	0.75	Chiefly cloudy, o, g, p.
"	16th	147.7	2.1	.561	82.6	87.2	9.0	78.2	80.0	.990	78.9	88	SE by S, ESE and SSW.	91	0.23	Chiefly cloudy, o, d, p, t.

The mean pressure of the seven days ...	...	...	...	Inches.
The average pressure of the corresponding period for 24 years, Surveyor-General's Office ...	...	...	...	29.521
The total number of hours of bright sunshine ...	...	...	...	Hours.
The maximum possible number of hours of sunshine ...	...	...	...	22.5
The mean temperature of the seven days ...	...	...	...	82.9
The average temperature of the corresponding period for 24 years, Surveyor-General's Office ...	...	...	...	85.0
The extreme variation of temperature ...	...	...	...	17.1
The maximum temperature ...	...	...	...	93.5
The highest velocity of the wind in one hour ...	...	...	...	Miles.
The mean relative humidity ...	...	...	...	18
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office ...	...	...	...	%
The total fall of rain from 10th to 16th June 1894 ...	...	...	...	86
The average fall of the corresponding period for 24 years, Surveyor-General's Office ...	...	...	...	81
The total fall from 1st January to 16th June 1894 ...	...	...	...	Inches.
The average fall of the corresponding period for 24 years, Surveyor-General's Office ...	...	...	...	2.98
The total fall from 1st January to 16th June 1894 ...	...	...	...	2.98
The average fall of the corresponding period for 24 years, Surveyor-General's Office ...	...	...	...	12.24
The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph.	...	...	...	15.32

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder; <, lightning; d, dew.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;  
Calcutta, the 18th June 1894.

J. H. GILLILAND  
For Meteorological Reports to the Govt. of India.



## IRRIGATION DEPARTMENT, BENGAL.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1894-95.

Areas leased for irrigation up to end of April 1894.

CIRCLE.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	DETAILS OF AREAS LEASED.						Rainfall, 1894-95.		Rainfall, 1893-94.		REMARKS.		
								Long-term leases.	Five years, kharif.	Annual leases.				Total.	GRAND TOTAL.	During month.	Up to end of month.		During month.	Up to end of month.
										Kharif.	Rabi.	Sugarcane.	Bhadol.								Hot-weather.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.			
ORISSA	Cuttack	Taldanda, 1st reach	1,342	150	55	18	5,591	.....	.....	.....	.....	.....	.....	0.55	0.50	0.50	0.50			
		Ditto, 2nd "	566	36	55	297	5,302	.....	.....	.....	.....	.....	.....	0.25	0.10	0.10	0.10			
		Machgon "	776	53	.....	4	37,899	.....	.....	.....	.....	.....	.....	0.45	0.40	0.40	0.40			
		Kendrapara "	1,067	.....	.....	51	484	.....	.....	.....	.....	.....	.....	.....	0.82	0.82	0.82	0.82		
		Gobri Extension	372.82	.....	.....	.....	9	571	.....	.....	.....	.....	.....	.....	No gauge.	.....	.....	.....		
		Do. Extension	648	.....	.....	.....	28	4,360	.....	.....	.....	.....	.....	.....	0.50	0.50	1.20	1.20		
		Panamul "	883	.....	.....	.....	42	10,275	.....	.....	.....	.....	.....	.....	1.86	1.86	3.33	3.33		
		High Level, Range I	608	27.42	3.31	.....	.....	294	.....	.....	.....	.....	.....	.....	No gauge.	.....	.....	.....		
		Ditto, do. II	727.16	Not observed.	.....	.....	.....	1,040	.....	.....	.....	.....	.....	.....	Ditto.	.....	.....	.....		
		Jajpur Canal	700	.....	.....	.....	.....	2,545	.....	.....	.....	.....	.....	.....	2.83	0.87	0.87	0.87		
SOUTH-WEST-ERS.	Midnapore	High Level, Range III	727.16	.....	.....	.....	653	68,251	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Total	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Total of the corresponding period of last year	.....	.....	.....	.....	.....	48,294	.....	96	.....	.....	.....	.....	.....	.....	.....	.....	6 days discharging.	
		Midnapore "	1,411	30	.....	.....	.....	62,493	.....	.....	.....	.....	.....	.....	1.75	1.75	1.90	1.90	16 days discharging.	
		Panchkura "	522	9	5	.....	.....	5,608	.....	.....	.....	.....	.....	.....	2.29	2.29	0.38	0.38		
		Tidal Reaches, Ranges I & II	.....	.....	.....	.....	.....	765	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Total	.....	.....	.....	.....	.....	68,956	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Total of the corresponding period of last year	.....	.....	.....	.....	.....	55,829	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Western Main	4,342	1,218	Nil	.....	50	13,937	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Boxar	1,236	97	66	.....	315	40,419	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
SONE	Shahabad	Arrah	2,060	684	535	7,294	7,717	95,671	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Eastern Main	1,466	272	113	.....	35	1,544	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Patna	.....	.....	.....	.....	1,479	53,889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
		Total	.....	.....	.....	.....	9,009	10,210	205,460	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Total of the corresponding period of last year	.....	.....	.....	.....	.....	.....	235,628	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Grand total	.....	.....	.....	.....	.....	.....	205,460	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Grand total of the corresponding period of last year	.....	.....	.....	.....	.....	.....	187,207	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Grand total	.....	.....	.....	.....	.....	.....	104,123	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Grand total of the corresponding period of last year	.....	.....	.....	.....	.....	.....	235,628	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Grand total	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

\* There are no separate leases for sugarcane on the Sone Canals. All leased fields of that crop now come under one of the other heads.

CALCUTTA,

The 18th June 1894.

J. H. TOOGOOD,  
Under-Secy. to the Govt. of Bengal.

## CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 16th June 1894, as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 16TH JUNE 1894.			WEEK ENDING SATURDAY, THE 17TH JUNE 1893.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	341	64,035	870	234	45,250	693
Jute ...	22	5,900	88	8	5,400	65
Firewood ...	86	60,125	905	95	54,475	772
Other articles ...	615	1,60,250	2,475	853	2,15,390	2,933
Total ...	1,064	2,90,310	4,338	1,190	3,20,515	4,463

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

*Approximate Return of Traffic for week ended 9th June 1894, on 1,659 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
Total traffic for the week ...	294,179	Rs. A. P. 2,87,147 - 1 0	Mds. s. 32,83,384 20	Rs. A. P. 7,18,136 10 0	Rs. A. P. 18,362 11 0	Rs. A. P. 10,23,646 6 0	75,023	127,858	202,880
Or per mile of railway ...	.....	173 1 4	.....	432 14 0	11 1 1	617 0 5	.....	.....	.....
For previous 21½ weeks of half-year ...	7,326,873	79,66,294 15 0	7,43,28,789 0	1,64,35,397 6 0	4,00,082 6 0	2,48,01,774 11 0	1,737,835½	2,815,257½	4,553,093½
Total for 22½ weeks ...	7,621,051	82,53,442 0 0	7,76,12,173 20	1,71,53,534 0 0	4,18,445 1 0	2,58,25,421 1 0	1,812,857½	2,943,115½	4,755,973½
COMPARISON.									
Total for corresponding week of previous year ...	332,150½	2,99,476 11 5	28,27,936 0	7,33,107 13 4	18,263 12 0	10,50,848 4 9	74,372	126,244	200,616
Per mile of railway corresponding week of previous year ...	.....	185 15 3	.....	455 3 4	11 5 5	652 8 0	.....	.....	.....
Total for corresponding 23 weeks of previous year ...	6,788,966	72,74,747 13 5	7,06,41,019 0	1,62,21,200 15 10	4,50,689 1 7	2,39,46,646 14 10	1,769,263	2,746,896	4,516,159

## TARKESSUR BRANCH RAILWAY.

*Approximate Return of Traffic for week ended 9th June 1894, on 22½ miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
Total traffic for the week ...	19,381	Rs. A. P. 5,043 15 0	Mds. s. 26,776 20	Rs. A. P. 746 10 0	Rs. A. P. 16 0 0	Rs. A. P. 5,806 9 0	855	113	968
Or per mile of railway ...	.....	226 11 1	.....	33 8 11	0 11 6	260 15 6	.....	.....	.....
For previous 21½ weeks of half-year ...	*523,747	*1,35,229 6 0	*1,19,210 20	*16,027 3 0	*294 0 0	1,51,550 9 0	19,623	2,223	21,846
Total for 22½ weeks ...	543,128	1,40,273 5 0	4,45,987 0	16,773 13 0	310 0 0	1,67,357 2 0	20,478	2,336	22,814
COMPARISON.									
Total for corresponding week of previous year ...	20,158	5,270 2 2	7,412 10	288 14 0	23 7 0	5,582 7 2	877	91	968
Per mile of railway corresponding week of previous year ...	.....	236 13 9	.....	12 15 9	1 0 10	250 14 4	.....	.....	.....
Total for corresponding 23 weeks of previous year ...	627,710½	1,38,368 9 11	2,60,863 20	9,006 9 0	255 0 0	1,47,570 2 11	20,566	2,342	22,908

\* Deducted number of passengers 728 and Rs. 839 } on account of difference between the approximate and audited figures for the week ended 5th May  
† Ditto Mds. 159 and " 5 } 1894.  
‡ Ditto " 3 }



## DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for the week ended 9th June 1894, on 161½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,201	13,102 6 0	48,184 20	8,673 2 0	61 0 0	21,836 8 0	5,590½	3,018½	8,609½
Or per mile of railway ...	.....	81 2 10	.....	53 11 10	0 6 1	135 4 9	.....	.....	.....
For previous 2½ weeks of half-year ...	*534,441	*4,08,261 13 0	†14,74,410 20	†2,03,188 2 0	†1,757 0 0	6,13,206 15 0	128,007	74,449½	202,456½
Total for 22½ weeks ...	551,642	4,21,364 3 0	15,22,595 0	2,11,861 4 0	1,818 0 0	6,35,043 7 0	133,597½	77,467½	211,065½
COMPARISON.									
Total for corresponding week of previous year ...	19,434	12,648 8 4	54,195 0	8,206 8 0	62 12 6	20,917 12 10	6,109	2,896	9,005
Per mile of railway corresponding week of previous year ...	.....	78 5 11	.....	50 13 6	0 6 3	129 9 8	.....	.....	.....
Total for corresponding 23 weeks of previous year ...	433,817½	3,21,317 3 10	16,75,816 20	2,12,176 6 3	1,084 7 6	5,34,578 1 7	135,672	74,300	210,032

\* Added number of passengers 1,018 and Rs. 1,347 }  
 † Do. Mds. 1,600 and deducted " 333 } on account of difference between the approximate and audited figures for the week ended 5th  
 ‡ Deducted " 16 } May 1894.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic for the week ended 9th June 1894, on 813 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	201,980	93,020 0 0	6,46,540 0	92,980 0 0	12,450 0 0	1,08,450 0 0	29,500	26,010	55,510
Or per mile of railway ...	248	114 0 0	795 0	114 0 0	*1 0 0	229 0 0	.....	.....	.....
For previous 23 weeks of half-year:† ...	4,428,512	21,11,976 0 0	1,76,59,899 0	23,36,547 0 0	6,13,696 0 0	50,62,219 0 0	639,407	649,654	1,289,061
Total for 23 weeks ...	4,630,492	22,04,996 0 0	1,83,06,439 0	24,29,527 0 0	6,26,146 0 0	52,60,669 0 0	668,907	675,664	1,344,571
COMPARISON.									
Total for corresponding week of previous year ...	207,253	80,743 1 8	4,57,863 0	77,940 4 0	11,251 4 8	1,69,934 10 4	28,620	23,552	52,172
Per mile of railway corresponding week of previous year ...	267	104 0 0	589 0	100 0 0	*1 0 0	205 0 0	.....	.....	.....
Total to corresponding date of previous year ...	4,158,393	19,53,970 13 11	1,70,78,825 0	21,23,182 6 3	3,64,317 8 6	44,41,470 12 8	657,866	644,046	1,301,912

\* Excluding steamer earnings.  
 † Audited up to 14th April 1894.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 9th June 1894, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	42,800	12,130 0 0	53,970 0	3,850 0 0	90 0 0	16,070 0 0	3,496	2,176	5,672
Or per mile of railway ...	342	97 0 0	433 0	31 0 0	1 0 0	129 0 0	.....	.....	.....
For previous 23 weeks of half-year* ...	728,178	2,50,448 0 0	13,12,429 0	83,340 0 0	2,765 0 0	3,36,554 0 0	84,753	39,731	124,484
Total for 23 weeks ...	768,978	2,62,578 0 0	13,66,399 0	87,190 0 0	2,856 0 0	3,52,624 0 0	88,249	41,907	130,156
COMPARISON.									
Total for corresponding week of previous year ...	30,309½	11,187 13 5	54,778 0	4,016 10 0	44 15 0	15,249 6 5	3,496	2,176	5,672
Per mile of railway corresponding week of previous year ...	314	90 0 0	438 0	32 0 0	.....	122 0 0	.....	.....	.....
Total to corresponding date of previous year ...	730,802	2,54,546 5 8	15,48,487 0	95,779 7 8	2,659 7 2	3,52,985 4 1	85,485	45,135	130,620

\* Audited up to 14th April 1894.



## DACCA STATE RAILWAY.

*Approximate Return of Traffic for the week ended 9th June 1894, on 86 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,410	5,630 0 0	14,780 0	1,400 0 0	90 0 0	7,120 0 0	1,711	1,513	3,224
Or per mile of railway ...	202	66 0 0	172 0	16 0 0	1 0 0	83 0 0	.....	.....	.....
For previous 22 weeks of half-year* ...	444,156	1,42,313 0 0	4,90,294 0	46,921 0 0	4,445 0 0	1,93,679 0 0	54,355	16,599	70,954
Total for 23 weeks ...	461,566	1,47,943 0 0	5,05,074 0	48,321 0 0	4,535 0 0	2,00,799 0 0	56,066	18,112	74,178
COMPARISON.									
Total for corresponding week of previous year ...	17,590	5,428 0 0	10,429 0	1,037 0 0	99 0 0	6,564 0 0	1,711	1,513	3,224
Per mile of railway corresponding week of previous year ...	204	63 0 0	121 0	12 0 0	1 0 0	76 0 0	.....	.....	.....
Total to corresponding date of previous year ...	410,156	1,27,967 0 0	3,50,101 0	31,650 0 0	4,028 0 0	1,63,645 0 0	39,314	34,993	74,307

\* Audited up to 14th April 1894.

## BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIBHUT STATE RAILWAY.)

*Approximate Return of Traffic for the week ending 9th June 1894, on 756 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open ...	111,710	46,070	497,540	75,280	9,280	(a) 1,30,630	12,504	23,879	36,383
Or per mile of railway ...	147.76	60.94	658.12	99.58	12.27	172.79	.....	.....	.....
For previous 21½ weeks of half-year ...	2,396,546	10,38,052	98,52,681	14,21,347	2,70,632	27,30,031	399,613	424,172	733,815
Total for 22½ weeks ...	2,508,256	10,84,122	1,03,50,221	14,96,627	2,79,912	28,00,661	322,147	448,051	770,198
COMPARISON.									
Total for corresponding week of previous year on 756 miles open ...	112,344	44,870	4,93,911	62,056	14,617	1,21,543	13,711	20,759	34,470
Per mile of corresponding week of previous year ...	148.60	59.35	653.32	82.09	19.33	160.77	.....	.....	.....
Total to corresponding date of previous year ...	2,348,833	9,98,891	1,11,46,748	15,65,861	3,27,026	28,91,778	314,647	456,350	770,997

(a) Due to improvement in traffic.

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

						Rs. A. P.
Approximate earnings for the week ending 9th June 1894	...	...	...	...	...	13,659 0 0
Corresponding period of 1893	...	...	...	...	...	13,415 0 0
Increase	...	...	...	...	...	144 0 0
Receipts per mile for the week ending 9th June 1894	...	...	...	...	...	265 13 10
Corresponding period of 1893	...	...	...	...	...	263 0 7
Increase	...	...	...	...	...	2 13 3
Receipts from 1st January to 9th June 1894	...	...	...	...	...	2,67,471 0 0
Corresponding period of 1893	...	...	...	...	...	2,75,117 0 0
Decrease	...	...	...	...	...	7,646 0 0



# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, JUNE 27, 1894.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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### RESOLUTION ON THE REPORT ON THE LEGAL AFFAIRS OF THE GOVERNMENT OF BENGAL FOR THE YEAR 1893-94.

#### JUDICIAL.

*Dated Darjeeling, the 19th June 1894.*

RESOLUTION No. 1058J.—D.

READ—

The report on the Legal Affairs of the Government of Bengal for the year 1893-94.

Read also—

The Reports of the two previous years, and the orders of Government thereon.

Since the issue of the Resolution on last year's Report on the Legal Affairs of Government, it has been decided that the latest date for the submission of these reports to Government should be the 15th of May following the close of the financial year to which they relate. In accordance with this decision, the present report was due on the 15th May 1894, but it was not received in this office till the 25th of that month.

2. At the close of 1892-93 there was only one appeal case pending before the Privy Council, in which the Secretary of State was respondent. The case is still undecided. No fresh appeal case was instituted before the Privy Council during the year.



3. The results of Government litigation in the Civil Courts in Bengal during 1893-94 are compared with those of the two preceding years in the subjoined table:—

	Original cases.			APPEALS.			APPEALS.			Total.		
				Before Lower Courts.			Before High Court.					
	1891-92.	1892-93.	1893-94.	1891-92.	1892-93.	1893-94.	1891-92.	1892-93.	1893-94.	1891-92.	1892-93.	1893-94.
1	2	3	4	5	6	7	8	9	10	11	12	13
Decided in favour of Government	238	336	209	32	44	47	10	11	27	280	301	283
Decided against Government ...	76	116	63	7	12	7	13	6	11	96	134	81
Compromised, remanded or withdrawn ...	125	108	46	3	8	18	7	4	6	135	120	70
Percentage in favour of Government.	75·7	74·4	76·8	82	78·5	87·03	43·5	64·7	71·05	74·4	74·5	77·7

Excluding land acquisition cases, the figures are—

	Original cases.			APPEALS.			APPEALS.			Total.		
				Before Lower Courts.			Before High Court.					
	1891-92.	1892-93.	1893-94.	1891-92.	1892-93.	1893-94.	1891-92.	1892-93.	1893-94.	1891-92.	1892-93.	1893-94.
1	2	3	4	5	6	7	8	9	10	11	12	13
Decided in favour of Government	95	145	104	32	44	47	10	11	27	137	200	178
Decided against Government ...	37	52	40	7	12	7	10	6	9	54	72	56
Compromised, remanded or withdrawn ...	11	8	21	3	8	18	6	4	5	20	20	44
Percentage in favour of Government ...	72	73·6	72·2	82	78·5	87·03	50	64·7	75	71·7	73·5	76·05

The percentage of original cases decided in favour of Government, including land acquisition cases, was 76·8, which is a better figure than either of the years 1891-92 and 1892-93. Excluding these cases, it was 72·2 against 73·6 in 1892-93; but if analogous cases in which Government was unsuccessful and which were governed by a single decision are taken as one, the percentage of Government success in the Courts of First Instance becomes 74·8. The results of Government litigation in the High Court and the Lower Appellate Courts show a decided improvement as compared with those of the two preceding years.

4. Of the 11 cases decided against Government by the High Court, in 6 it appeared as appellant, and in the remaining 5 as respondent. Of the 6 cases in which Government was appellant, three were appeals from original decrees, and the rest appeals from appellate decrees. The most important among the former was a case in which the sale of a *taluk* under the Revenue Sale law for a demand, a part of which only was revenue, was declared to be illegal and invalid. It was held that procedure should properly have been taken under the Public Demands Recovery Act, VII (B.C.) of 1880. The three second appeals arose out of certain settlement proceedings, in which the question at issue was whether, in preparing a record of rights under section 102 of the Bengal Tenancy Act, a Revenue Officer is competent to determine the validity of rent-free titles set up by persons occupying lands within the area under enquiry, so as to resume such lands and to declare them liable to settlement of rent. The question was decided in the negative by a Full Bench of the High Court. Of the five cases decided by the High Court against Government as respondent, two were for the recovery of fractional shares of surplus sale proceeds of estates sold for arrears of revenue, in which the decision was based on the Full Bench ruling in the case of Secretary of State *versus* Guru Proshad Dhur, I. L. Reports, 20 Cal., 51; one was for *khas* possession of a certain share of a *taluk* by adverse possession of more than 60 years, and the remaining two were cases under the Land Acquisition Act. There was only one important case decided against Government in the Lower Appellate Courts, in which it was decided that the Tirhut State Railway was liable to pay damages for goods, even though the servant of the consignor had signed a risk-note. Of the cases in the Courts of First Instance in which Government was unsuccessful, many were for possession of lands formed by alluvion, setting aside the settlements made by the Deara authorities, and none were of special interest or importance.



5. The following statement shows the results of Court of Wards' litigation during the last three years in all Courts:—

	1891-92.	1892-93.	1893-94.
1	2	3	4
Decided in favour of Court of Wards ...	903	654	1,322
Decided against Court of Wards ...	139	73	140
Compromised, remanded or withdrawn ...	76	66	55
Percentage in favour of Court of Wards ...	86.6	89.9	90.4

The increase in the number of cases decided during the year is attributed to the institution of a large number of rent suits on behalf of the Burdwan Raj estate and the Dighapatia and Khagra estates in the districts of Burdwan, Hooghly and Bankura, Jessore, and Pabna and Purnea, respectively. In the only case decided by the High Court against the Court of Wards as appellant, viz., that of Tikari estate *versus* Raghunandan Persad Singh, it was held that all impositions upon tenants under the denomination of *abwabs* and other like appellations in addition to actual rent are illegal, and all stipulations and reservations to pay the same are void. Out of 108 cases decided against the Court of Wards in the Courts of First Instance, only 11 were of the nature of civil suits: the remainder were rent cases with a small number of bond suits which, under the Civil Suit Rules, are not reported to the Legal Remembrancer.

6. The following figures show the extent to which decretal amounts due to Government have been realized:—

	1891-92.	1892-93.	1893-94.
1	2	3	4
	Rs.	Rs.	Rs.
1. Amount under realization ...	64,248	42,617	47,190
2. „ realized during the year ...	30,333	12,616	8,943
3. Percentage of recovery ...	45.25	29.5	18.95

The net outstanding balance at the close of the year was Rs. 37,154. The poor realization made during the year is said to have been due to the want of zeal on the part of the subordinate collecting agency added to the inherent difficulty of the task of finding out properties belonging to judgment-debtors which are very easily concealed or placed beyond the reach of attachment. The heaviest outstanding balances were in the marginally-noted districts. The large balance in the Sonthal Parganas is on account of a High Court decree obtained during the year.

7. The following table shows the amount of Wards' decrees realized during the year as compared with the two preceding years:—

	1891-92.	1892-93.	1893-94.
1	2	3	4
	Rs.	Rs.	Rs.
1. Amount under realization ...	10,95,704	9,83,675	10,80,794
2. „ realized during the year ...	2,30,997	1,59,690	2,00,671
3. Percentage of recovery ...	21.07	16.25	18.56

This table does not include the decrees of 14 estates under the management of the Court of Wards, the figures relating to which had not been received by the Legal Remembrancer at the time of the submission of his report. The percentage of recovery of Wards' decrees during 1893-94 shows some improvement as compared with the preceding year; but the Lieutenant-Governor notices that the outstanding balance still remains excessive in spite of the large remission made during the year. In some estates there have been no realizations, and in many the amount recovered is small as compared with the outstanding balance. Thus, in the Moheshpore estate in Midnapore, out of Rs. 73,491 due to the estate, nothing was realized during the year. In the Tikari estate, out of Rs. 2,71,771 due to the estate, only Rs. 41,390 were realized. In the Burdwan Raj estate, out of Rs. 1,91,390 due, Rs. 95,953 were realized and a large sum is said to be not yet under execution. The results appear to the Lieutenant-Governor to be very unsatisfactory, and the attention of the Board of Revenue will be invited to the matter.

ORDER—Ordered that a copy of the Resolution be forwarded to the Superintendent and Remembrancer of Legal Affairs and the Solicitor to Government for information.

Ordered also, that a copy of the Resolution be forwarded to the Revenue Department of this Government and to the Board of Revenue for information.

Ordered also, that a copy of the Report and Resolution be submitted to the Government of India in the Home Department for information.

Ordered also, that a copy of the Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

*Chief Secretary to the Govt. of Bengal.*

# RESOLUTION ON THE ANNUAL REPORT ON EMIGRATION FROM THE PORT OF CALCUTTA TO BRITISH AND FOREIGN COLONIES FOR 1893.

## GENERAL DEPARTMENT—EMIGRATION.

*Darjeeling, the 23rd June 1894.*

RESOLUTION No. 85T.G.

READ—

The Annual Report on Emigration from the Port of Calcutta to British and Foreign Colonies for the year 1893.

This Report was punctually submitted by Dr. R. Macleod, who acted as Protector of Emigrants throughout the year, with the exception of a short period during which he was absent on leave and Dr. W. Forsyth acted for him. The Report follows the usual lines, and is illustrated by two maps indicating, by means of different shades of colour, the proportion which emigrants to the Colonies bear to the resident population, first, with reference to the native districts of the emigrants; and secondly, with reference to the districts in which they were registered.

2. Some amendments were made during the year in the rules issued under the Colonial Emigration Act, XXI of 1883, and, among other changes, a revised scale of the medicines and medical comforts, miscellaneous medical stores, and other stores with which emigrant vessels must be provided, was adopted and enforced.

3. Eight agencies, including seven British and one Dutch, were engaged during the year in collecting and despatching labourers to the Colonies, against five in the previous year. Nevertheless the number of adult labourers indentured for suffered a further slight reduction from 10,558 in 1892 to 10,510 in 1893. The requisitions made by the Colonies were as follows:—

				Indented for.	Supplied.
Demerara	...	...	...	5,450	4,959½
Trinidad	...	...	...	1,800	1,807
St. Lucia	...	...	...	150	150
Jamaica	...	...	...	472	469½
Mauritius	...	...	...	465	350
Natal	...	...	...	361	547½
Fiji	...	...	...	700	750
Surinam	...	...	...	1,112	1,034½
Total	...	...	...	10,510	10,068

In respect of four Colonies the supply was equal to or greater than the demand, while the deficiencies in the cases of British and Dutch Guiana were more than made good early in the present year. The deficiency in the case of Jamaica was trifling, but in that of Mauritius was relatively large, a fact which may be explained by the amount of the average savings per emigrant brought back from the different Colonies, which is far the smallest in the case of Mauritius. No emigrants were required by the Colonies of Nevis, St. Kitts, St. Vincent, and Grenada, and none were supplied to the French Colonies.

4. Eight hundred and sixty-six recruiting licenses (of which six were subsequently cancelled for misconduct on the part of the holders) were granted during the year, against 857 (of which two were cancelled) in 1892. It is reported that recruiters are licensed to collect labourers for more than one Colony, and that they supply the requirements of each in succession. To this arrangement, so long as it is carried out with the consent of the different Agencies concerned, there appears to be no objection.

The total number of intending emigrants registered was 15,046 against 17,225 in the previous year. Of this number 4,682, or 31 per cent., were registered in Bengal and Bihar, and 10,364, or 69 per cent., in the North-Western Provinces and Oudh, against 30 per cent. and 70 per cent. respectively in 1892. These figures point to a development of the tendency to recruit emigrants in



the Lower Provinces, which was noticed in the Resolution recorded last year. A further development is the increase in the number registered in Bengal, which rose from 2,126 in 1892 to 2,520, and is accompanied by a more than corresponding decrease in the number registered in Bihar, which fell from 3,012 to 2,162. Of those registered in Bengal, 2,445 were registered in the 24-Parganas, Howrah and Burdwan, though only 57 of them were natives of these districts. These figures suggest the inference that the depôts for free emigrants established by contractors working outside the provisions of the Assam Labour and Emigration Act were largely resorted to, and indicate the method in which the greater part of the labour required may at some future time be obtained, if the practice receives no check. In respect of the number of registrations, the district of the 24-Parganas stands first, closely followed by Cawnpur, Fyzabad, and Benares, and at some little distance by Shahabad, all of which show over 1,000 registrations, while Allahabad, Ghazipur, Lucknow, Gorakhpur and Burdwan come next with over 500. If regard is had to the native districts of the intending emigrants, then Basti, Azamgarh, Gonda, and Shahabad head the list followed by Ghazipur, Fyzabad, Jaunpur, and Gorakhpur. The following table compares the Province of registration with that of birth as declared by the emigrants:—

	Bengal.	Bihar.	North-West- ern Provin- ces.	Oudh.	
1	2	3	4	5	
Number registered in ...	1892	2,126	3,012	9,212	2,875
	1893	2,520	2,162	7,463	2,901
Number who declared themselves to be natives of.	1892	2,743		14,028	
	1893	2,649		11,791	

Of the 606 emigrants whose Province of birth is not given in the above table, 372 appear to have been born in the Native States and 130 in the Punjab; the remainder include five natives of Demerara and one of Singapore.

5. If to the number of intending emigrants registered during the year History of intending emigrants subsequent to registration. is added the number remaining in the mufassal sub-depôts at the close of the previous year, the total number to be accounted for amounts to 15,136. From this number a large deduction must be made on account of those subsequently rejected as unfit to proceed. One thousand four hundred and sixty-four or 9·6 per cent., against 7·9 per cent. in 1892, were so rejected before being despatched to the depôts at Garden Reach, and out of a total depôt population of 13,220 (including emigrants remaining over from the previous year and a few others) 1,079 were rejected on medical grounds, or 8·16 per cent. against 8·92 per cent. in the previous year. These results, though in the latter case a slight improvement is apparent in comparison with the previous year, indicate want of care in recruiting and inefficient medical examination before registration. It should be an especial object to reduce to the lowest limits possible the number whom it is necessary to reject after being brought to Calcutta, for while the rejected labourers are in that case put to much inconvenience, the needless expense of restoring them to distant homes is incurred by the Colonies concerned.

Attention, however, has already been directed to the point, and it is hoped that the measures which have recently been taken with the assistance of Government to ensure a stricter medical examination of intending emigrants in the first instance will prove effectual.

The case of labourers who desert after being registered, or who are released as being unwilling to proceed, is analogous, in so far as it may be attributed to the fact that their consent having been unwillingly given they should not have

been recruited, or to the fact that they were not properly questioned at the time of registration. So many as 381 emigrants or 2·47 per cent. of those registered deserted before arrival at the depôts against 464 or 2·69 per cent. in 1892, and 81 were released as unwilling to proceed against 55. Subsequently 159 deserted from the depôts, and 101 were released against 211 and 104 in 1892.

The number of emigrants who arrived at the depôts was 12,264; prior to this seven deaths occurred against six in 1892. The remainder (including those who were rejected or were released or deserted) are satisfactorily accounted for, with the exception of 345 against 584 similarly unaccounted for in 1892. The introduction of sub-depôt registers during the year, which was mentioned in last year's Resolution, will no doubt effect still further improvement in this respect, and in fact if these registers are properly maintained, there would seem to be no reason why a complete record should not exist, showing the history of every intending emigrant subsequent to registration.

6. The report of the Medical Inspector of Emigrants, Surgeon Lieutenant-Colonel R. L. Dutt, shows that a remarkably high standard has been reached in the general arrangements, sanitation and management of the Calcutta depôts, and the Lieutenant-Governor regards the excellent results obtained in the past year as extremely creditable to all concerned. Out of a total strength of 13,220 emigrants, the small number of 359 or 2·71 per cent. were admitted into hospital, and only 14 or 0·10 per cent. died, figures which Mr. Dutt describes as incredibly low, regard being had to the fact that malarious fever was exceptionally prevalent in the neighbourhood. In 1892 the percentages of sickness and mortality were 4·44 and 0·37, and in 1891 they were 4·67 and 0·66 respectively. The improvement therefore is progressive, and indicates the continuous attention paid to drainage, water-supply and conservancy. Of the 14 deaths which occurred during the year, one was due to measles, three to fever, four to chest diseases, one to cholera, and five to other causes. The following remarks of the Medical Inspector in connection with the decrease of cholera are interesting, and may be regarded as a tribute to the excellence of the Calcutta water-supply:—

“Cholera.—Since the depôts were connected with the Calcutta water-supply, cholera has become a rare disease among emigrants. Up to the year 1891 several depôts were supplied with tank or river water after filtration for drinking purposes. Cholera was a frequent visitor previous to 1892.

“In 1891 there were 31 cases with 18 deaths. In 1892, when all the depôts were connected with the Calcutta main, the disease considerably abated. Only eight cases occurred with six deaths. In the year under report, when the emigrants had the Calcutta filtered water throughout the year, the number of cases has been only two with one death. One case occurred in the Fiji depôt on the 14th January last and recovered, and the other in the Demerara depôt, which proved fatal.”

7. The number of emigrants who embarked for the colonies during the year was 10,674, distributed between 20 vessels, of which 17 were sailing ships and 3 steamers, being an average of 533 persons for each vessel. The results of two voyages have not yet been reported, but the number of deaths which occurred in the 18 vessels which have sent in their papers was 121, being 1·27 per cent. of the number on board, while in the previous year the percentage was 1·31 in the course of 20 voyages. The steamers chartered for the conveyance of emigrants were the *Pongola*, the *Congella* and the *Warora*, of which the two former were in the trade in 1892. From the point of view of the health of emigrants, statistics are in favour of steamers as opposed to sailing ships: no deaths occurring on board the *Pongola* or the *Warora*, and only one on the *Congella*. This is partly because the duration of the voyage in the case of steamers is considerably shorter, the average being 22 days against 92 days in the case of sailing ships. The ship *Volga* was wrecked during the year at the mouth of Castries Harbour, but the emigrants and crew were rescued without loss of life. The Lieutenant-Governor notices with satisfaction that no vessel was detained on account of an epidemic of disease during the year.

8. Five thousand one hundred and seventy-three emigrants were re-shipped from the various colonies in 6 sailing vessels and 10 steamers, as against 5,225 emigrants



re-shipped in 8 sailing ships and 8 steamers in 1892. The number of steamers employed for the purpose has therefore increased, and it is noticeable that while only three steamers were chartered to convey out-going emigrants, 10 steamers were engaged in bringing emigrants back. The number of deaths (excluding the mortality among infants born on the voyage) was 88 or 1·70 per cent. against 87 or 1·66 per cent. in the previous year. In neither case can the percentage be regarded as high, looking to the fact that a certain proportion of the returning emigrants are advanced in age and enfeebled in health. Including the mortality among infants born on the voyage, the number of deaths was 91, and of these 19 occurred in steamers and 72 in sailing vessels, the ratio of deaths to the total number on board being 1·35 and 1·9 respectively. The average duration of the voyage in the case of steamers was 32 days and in the case of sailing vessels 143 days. The savings brought back averaged nearly Rs. 140 per emigrant embarked, against Rs. 156 in 1892, and Rs. 138 in 1891. The largest average, amounting to Rs. 297 per head, was shown by Natal, and the smallest, as in the previous year, by Mauritius. The number of return emigrants who went back to the colonies was 776 against 551 in 1892, and in both years the greater number selected Demerara and Trinidad.

9. The estates of deceased emigrants which came under the administration of the Protector were in 1893, 526 valued at Rs. 77,200-8-11, against 500 valued at Rs. 70,384-1-3 in 1892. Enquiries were completed in respect of 293, valued at Rs. 45,305-12, leaving a balance of 233, valued at Rs. 31,894-12-11, in respect of which enquiries were in progress at the close of the year. The Protector reports that a sum of Rs. 6,650 standing at the credit of 56 estates lapsed to the Indian or Colonial Governments, owing in some cases to the absence of heirs, and in others to inability to trace them, due to the falsified particulars furnished by their emigrant relatives at registration. This is an important fact in weighing the merits of free as compared with registered emigration, for it appears that the mere fact of registration does not furnish an effectual security that the identity of an emigrant or his correct address has been ascertained before he leaves his native country. The Lieutenant-Governor is gratified to learn that the Colonial authorities more generally recognize the importance of instituting prompt inquiries for persons who are legally entitled to succeed to the estates of deceased emigrants, and trusts that the subject may continue to receive attention at their hands.

10. The receipts derived from the consolidated fee of Rs. 3 per head on each emigrant embarked fell from Rs. 35,272-4 to Rs. 30,270, a result due to the smaller number of emigrants embarked and to the fact that the fees payable on account of 584 emigrants despatched by the ship *Bann*, which left the Port of Calcutta on the 24th December 1893, were not realized till the following January. The expenditure increased from Rs. 29,617 in 1892 to Rs. 31,753 in 1893, and the year closed with a deficit of Rs. 1,483, against a surplus of Rs. 5,656 in 1892. The increased charges occur principally under the head Pay and Allowance of Emigration officers and have not been explained.

11. The Lieutenant-Governor desires to record his satisfaction with the general results of the year's operations, and his acknowledgments are due not only for the efficient manner in which Dr. Macleod and Surgeon Lieutenant-Colonel R. L. Dutt performed their duties, but also for the valuable assistance rendered to these officers by the Emigration Agents.

ORDER.—Ordered that a copy of the Report and of this Resolution be submitted to the Government of India, Revenue and Agricultural Department, for information.

Ordered also that a copy be forwarded to the Protector of Emigrants, Calcutta, for information, and to all Commissioners of Divisions for information and circulation to all District Officers subordinate to them.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,  
Secretary to the Govt. of Bengal.



## RESOLUTION ON THE REPORT ON CALCUTTA MEDICAL INSTITUTIONS FOR THE YEAR 1893.

## MUNICIPAL DEPARTMENT—MEDICAL.

Darjeeling, the 25th June 1894.

RESOLUTION—No. 2613Medl.

READ—

The Report on the Calcutta Medical Institutions for the year 1893.

Read also—

The Report for the year 1892, and the Resolution recorded upon it.

Judged by the statistics contained in the report, the health of Howrah and of the town portion of Calcutta was much better in 1893 than in the previous year; and the rate of mortality in both places (21·4 and 25·9, per mille respectively against 23·7 and 27·1 in 1892) was remarkably low. The area added to the Municipality of Calcutta by Bengal Act II of 1888 was not, however, so healthy, and the death-rate in that locality rose from 34·8 to 37·1 per mille. The mortality from cholera shows a considerable decrease in all three areas, and in Calcutta it was the lowest known during the last ten years. On the other hand, the death-rate from fever was above the average, and out of a total of 22,610 deaths registered during the year, 9,067 were ascribed to this cause. The prevalence of fever is said to have been due to excessive and prolonged rainfall amounting to 85·2 inches, against 46·6 in the previous year, which favoured the development of *bacillus malarie*. Naturally the death-rate from fever in the Suburban area, which is still very imperfectly drained, was higher than in Howrah or the Town of Calcutta. Bowel-complaints caused a larger number of deaths than in the previous year. Small-pox shows a slight increase in Howrah and the amalgamated area; but there were only 39 deaths in all. The mortality from other causes shows a slight falling off in Calcutta, but in Howrah and the Suburbs there is a slight increase.

2. The following table gives the number of in-door and out-door patients treated in the several hospitals in the metropolis during the past two years:—

NAME OF INSTITUTION.	1892.									1893.								
	IN-DOOR.			OUT-DOOR.			Total number of patients, both in-door and out-door.	Total number of deaths among in-door patients.	Percentage of deaths on total number of in-door patients treated.	IN-DOOR.			OUT-DOOR.			Total number of patients treated both in-door and out-door.	Total number of deaths among in-door patients.	Percentage of deaths among total number of in-door patients.
	Number treated.	Daily average.	Number of beds available.	Number treated.	Daily average.					Number treated.	Daily average.	Number of beds available.	Number treated.	Daily average.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
Medical College Hospital ...	7,054	400·79	449	54,669	394·11	61,714	744	11·41	7,025	394·51	449	54,091	389·04	61,116	737	11·38		
Residency General Hospital ...	3,498	163·11	238	.....	.....	3,498	120	3·43	3,063	163·01	238	.....	.....	3,063	134	4·37		
Campbell Hospital ...	8,551	445·23	588	11,470	90·46	20,021	1,687	19·72	9,384	497·07	588	22,566	188·55	31,950	1,797	19·14		
Police Hospital ...	2,045	88·36	175	.....	.....	2,045	20	·97	2,408	100	175	.....	.....	2,408	25	1·03		
Mayo Native Hospital ...	1,756	80·7	105	27,508	174·8	29,264	228	12·97	1,870	85·6	105	29,742	189·7	31,612	177	9·46		
Chandney Hospital ...	421	13·92	12	44,947	344·86	45,368	10	2·37	433	15·16	12	44,335	313·23	44,788	14	3·24		
Ark Street Dispensary ...	.....	.....	.....	28,847	186·7	28,847	.....	.....	.....	.....	.....	29,149	175·0	29,149	.....	.....		
Titpur Dispensary ...	.....	.....	.....	20,621	154·8	20,621	.....	.....	.....	.....	.....	23,383	105	23,383	.....	.....		
Allen's Street Dispensary ...	.....	.....	.....	18,483	151·55	18,483	.....	.....	.....	.....	.....	19,390	158·37	19,390	.....	.....		
Dufferin Victoria Hospital ...	.....	.....	.....	.....	.....	.....	.....	.....	155	9·85	22	8,758	65·99	8,913	6	3·87		
Howanipur Dispensary ...	.....	.....	.....	9,737	85·49	9,739	.....	.....	.....	.....	.....	10,287	90·75	10,287	.....	.....		
Total ...	23,325	1,197·11	1,567	216,275	1,582·77	239,600	2,809	12·32	24,336	1,265·20	1,589	241,721	1,735·33	266,067	2,890	12·14		
Howrah General Hospital ...	1,886	79·18	108	10,497	88·28	12,383	332	17·60	1,722	73·18	108	10,338	90·50	12,060	397	23·06		
GRAND TOTAL ...	25,211	1,276·29	1,675	226,772	1,671·05	251,983	3,141	12·72	26,058	1,338·38	1,697	252,059	1,825·92	278,117	3,287	12·88		

3. The above figures show a satisfactory increase of 25,287 in the number of out-door patients treated and of 155 in their daily average attendance. This increase is distributed over all the institutions, excepting the Medical College Hospital, the Chandney Hospital, and the Howrah General Hospital, and is said to be due partly to the inclusion for the first time of the statistics of the Dufferin Victoria Hospital, and partly to the increased prevalence of fever and bowel-complaints, while it certainly points to the growing popularity of the out-door departments of the several institutions. The out-door ward of the Campbell Hospital,

opened in January 1892, to the efficiency of which the Inspector-General of Civil Hospitals bears testimony, has drawn away some of the patients who used formerly to attend the Medical College Hospital, but the decrease of 569 in the attendance at that institution was due to a temporary cause only. The decrease in the Howrah General Hospital was very small, while that in the Chandney Hospital was due to the fact that the admissions in the previous year had been abnormally large, owing to a severe epidemic of influenza in that neighbourhood.

4. The total number of in-door patients rose from 25,211 to 26,058. The increase occurred chiefly in the Police Hospital, the Campbell Hospital, and the Mayo Hospital, and is attributed to climatic causes, and to the high prices of food which tell chiefly on the poorer classes. Moreover, the Mayo Hospital was open for the whole of 1893, whereas it was closed for two months in 1892, and the figures for the Dufferin Hospital for women have been included for the first time. The large decrease in the Presidency and Howrah General Hospitals, which is observed chiefly in the numbers of Europeans, appears to be due to the better general health of the population in the port, since with a daily population in 1893, which was only  $2\frac{1}{2}$  per cent. below that of 1892, the admissions to hospital were 25 per cent. less than in the former year.

5. Of the total number of patients, both in-door and out-door, treated in all the hospitals, 167,092 were adult males, 45,290 adult females, and 65,735 children. The corresponding figures for the previous year were 154,492, 37,707, and 59,784. There was thus an increase of 26,134 in the patients of both sexes. Of these patients, 49.06 per cent. were Hindus, next in order coming the Muhammadans, 32.61, the Eurasians 10.88, and the Europeans 3.002. The number of Europeans who sought relief in the hospitals fell from 9,233 to 8,351, owing partly to fewer sailors having visited the port, as has been stated, but chiefly to an improvement in their general health.

6. The death-rate among the inmates of the medical institutions was almost the same as that of the previous year, being 12.8, against 12.7 per cent. The proportion of deaths in the different hospitals, however, varies considerably, and the remarks of the Inspector-General of Civil Hospitals are so much to the point that they are quoted below:—

“Hospital statistics are the most misleading in the world, unless all the circumstances of each hospital are known. The nature and importance of the cases treated, the proportion of medical to surgical cases, the condition of the patients on admission, the admission or exclusion of particular diseases such as the exanthematous fevers, venereal diseases, eye cases, &c., are all important factors in the death-rate. Some of the finest and best managed modern hospitals have very high death-rates, and some of the worst and oldest, low ones; but the first take in by preference all cases whose need is greatest, while the others exclude all infectious or apparently moribund cases. At Sealdah and Howrah no patients are refused, and large numbers of dying persons picked up by the police are brought to each, while the majority of the patients are of the very poorest classes, living under the worst sanitary conditions. At the Chandney Hospital very few moribunds are admitted, and many of the in-patients are persons suffering from slight injuries. The female patients at the Presidency General Hospital are for the most part Europeans and Eurasians in fairly easy circumstances, admitting of no comparison with those treated at Sealdah or Howrah.”

The mortality among adult males increased from 11.94 to 12.07, and that among female children from 9.81 to 14.78. An increase in the figures at Howrah is due to a great influx of pilgrims returning from Puri, many of whom were moribund from dysentery and diarrhoea when admitted.

7. The number of small-pox cases in Calcutta, all of which are now sent to the small-pox wards of the Campbell Hospital at Sealdah, rose from 35 to 49, of which 13 proved fatal, giving a death-rate of 26.53. It is noticeable that in only 13 of these cases were the patients said to have been vaccinated, and in 9 of them the vaccinal scars were indistinct. Among those who had been vaccinated, but who bore only indistinct marks of the operation, there were three deaths. Dr. Harvey remarks that “the mere operation of vaccination conveys no protection against small-pox unless it produces the disease vaccinia, and unless this is allowed to run its course to maturity. Vaccination with bad lymph or destruction of the vesicles by the application of mud, turmeric or other drugs—a practice common in this country—is followed by no security.” The Lieutenant-Governor has no doubt that much of the dislike to vaccination felt by the public is due to the use of imperfect lymph or to the improper performance of the operation, and the Sanitary Commissioner will be requested to communicate



to his subordinates the remarks of the Inspector-General of Civil Hospitals on the subject.

8. The number of admissions to hospital for cholera decreased in proportion to the relative prevalence of the disease among the general population of the town, but the percentage of death among the patients admitted was rather high, being 55.9. The death-rate among Europeans and Eurasians was 57.14, and among other classes 55.85. There were 10 cases of cholera among patients under treatment for other diseases. Eight of these occurred in the Howrah General Hospital, and are attributed to the insanitary condition of the town, and to the impurity of the water: it is very significant that with the exception of two cases in the Campbell Hospital for which no cause is assigned, no case originated in any Calcutta hospital, all of which enjoy a supply of pure water. In paragraph 11 of the report, Dr. Harvey has referred to the system of protective inoculation against cholera introduced by Professor Haffkine of the Pasteur Institute of Paris, and expressed his own views on its efficacy. His approval of the system should be noted, and efforts should be made to collect statistics as to the immunity afforded by the operation. An interesting report has recently been submitted by Dr. Simpson, the Health Officer of Calcutta, dealing with certain cases of immunity apparently due to this system of inoculation. The matter well deserves further investigation.

9. There was a large increase in the cases of dysentery and diarrhoea, and the proportion of deaths from these diseases was very high in all the institutions excepting the Police Hospital, where there were only 5 deaths from dysentery in 225 cases. It is, however, stated that a large number of these cases were examples of chronic and neglected disease admitted to hospital in a practically hopeless condition. The number of cases of malarial fever rose from 41,202 to 49,080, a result in keeping with the increased prevalence of the disease among the general population. The type of the disease is said to have been unusually severe, but the death-rate among the in-patients suffering from this disease was lower than during 1892. The total number of persons treated for venereal diseases was 14,483, against 13,072 in 1892, showing an increase of 1,411 cases, of which no less than 1,043 were cases of primary and secondary syphilis—the worst forms of venereal disease. The number of in-door patients admitted for these diseases, however, fell from 1,846 to 1,751, and there were only 2 deaths against 14 in the previous year. The disease is said to have been less prevalent among the European garrison. Admissions for leprosy show a reduction from 94 to 32, but all the patients admitted were at an advanced stage of the disease, and 10 of them died, giving a death-rate of 31.25 per cent. The largest number of these cases was treated at the Campbell Hospital, but some of them also found admission into the Presidency and Howrah General Hospitals and the Medical College Hospital. The Inspector-General of Civil Hospitals again brings to notice the natural disinclination to admit these cases into a public hospital unless they are in urgent need of help, and the Lieutenant-Governor thinks that all leprosy cases in Calcutta should be sent to the Leper asylum. This point will be considered in dealing with the question of increased accommodation required for that institution. There were 17 cases of enteric fever, against 12 in the previous year, and 12 of these patients were Europeans, among whom there were 5 deaths. The admissions for remittent fever show a little diminution, being 1,184 against 1,215 in 1892, and the rate of mortality was 29.05.

10. The total number of major operations amounted to 3,339, and death ensued in 110 cases, against 3,403 operations with 134 deaths in the previous year, the percentage of deaths being 3.15 against 3.78. This death-rate cannot, however, be fairly compared with that of the previous year, as many cases which were formerly classed as minor operations have now been included in the category of major operations. The hospitals in which the largest amount of general and important surgical work is done are the Medical College and the Mayo Hospitals, while the operations at the Eden and Shama Charan Law Hospitals are equally important, but of a more special character. The largest number of operations was performed at the Medical College Hospital, where the year has been one of great surgical activity, with very satisfactory results: the death-rate in amputation cases shows a noticeable improvement. The major operations performed at the Campbell and the Mayo Hospitals were also numerous, and gave a low rate of mortality, but at the former institution, beyond the amputation cases, there were very few



really important operations, and the students of the Medical School at Sealdah, unlike those at Patna, Dacca, and Cuttack, had very limited opportunities of acquiring a knowledge of the higher surgery. The Inspector-General of Civil Hospitals does not hope for any great improvement in this respect until a proper surgical ward has been provided: the construction of such a ward has now been sanctioned, and the work is being taken in hand during the current year. The statistics of the Dufferin Hospital for women have for the first time been included in this report, and show 12 major operations. Dr. Harvey passes a severe but not undeserved condemnation upon the situation and surroundings of this hospital: his remarks will be communicated to the Secretary to the Bengal Branch of the Lady Dufferin Fund. In the Howrah General Hospital the number of major operations fell from 230 to 116, but the number is said to have been abnormally large in 1892 owing to the number of operations on the eye performed by Surgeon-Major R. D. Murray, who had a special reputation in ophthalmic cases. It is, however, observed that this hospital has been deprived of credit for 47 operations for the setting of fractures which have not been included in the present classification, though this important operation involves as much anxious work as any surgical case. The total number of minor operations was 19,001 against 19,880, showing a reduction of 879 cases, but it is said that no record of the minor operations performed at the Eden Hospital was maintained, which makes these statistics incomplete and accounts for the falling off noticed above. The Inspector-General of Civil Hospitals has taken the necessary steps to provide against such omissions in future. The number of dental operations performed during the year was 2,468 against 2,744 in the previous year. The Eurasians again head the list of persons applying for dental relief, while the number of Europeans fell from 702 to 695.

11. The number of admissions into the Eden Hospital was 1,367 against 1,546 in the previous year. The decrease is said to be due to cases of minor importance having been treated in the out-door department, but the attendance in that department also shows a reduction. There was, however, an increase in the average daily *number of inmates*, which indicates that the cases treated were severe in nature, requiring a long stay at the hospital. The death-rate among Europeans was very high, being 8·40 per cent. against 3·36 in 1892, while that among Hindus and Muhammadans shows a reduction from 8·98 to 8·42 per cent. The percentage of deaths among other classes was 12·02. There were 573 confinement cases against 501 in 1892, of which 25 ended fatally against 26. The number of cases of septicæmia was the same as in the previous year, viz. 31, but there were fewer deaths. A proposal for the construction of a special ward for the treatment of this disease is under consideration: such a ward is much wanted, and it is hoped that it may soon be taken in hand. The Lieutenant-Governor observes again in the statistics of this hospital proof of the lamentable tendency of natives to delay the removal of a patient to the hospital till the case is almost hopeless, but he is glad to learn that the usefulness of the institution is increasing year by year. In this hospital, 337 major operations were performed, against 365 in 1892, and death followed in 31 cases.

12. The number of in-door patients treated in the Shama Charan Law Eye Infirmary was almost the same as in the previous year, but the increase of out-door patients noticed last year has not been maintained. Most of the operations performed in this hospital were extractions of the lens, and 70·98 per cent. of these operations were entirely successful.

13. The number of out-door patients treated in the Ezra Hospital rose by 383, but that of the in-door patients was very small, being 281 against 350 in the previous year; and out of 22 beds provided in the hospital, only 14 were constantly occupied, owing, it is said, to the admission being restricted to Jews to the exclusion of Parsis, Arabs, Armenians, &c., who have hitherto received admission to this institution more or less freely. The Lieutenant-Governor regrets that this fine hospital is not more used, and he desires that the terms under which the hospital was originally built and equipped should be acted up to, and the sick of all nationalities admitted when there is room for them owing to the absence of Jewish patients. If the Jewish community desire that admission to this hospital should be strictly confined to the Jews, the Lieutenant-Governor must ask the wealthy members of that community to support it more liberally. It appears that out of a total expenditure of Rs. 7,547 incurred in the hospital during 1893, only Rs. 936 was met from the endowments of the founder, and Government had to pay the balance.

14. Very great improvement is said to have been made in the nursing arrangements at the different hospitals. The Medical College, the Eden and the Presidency General Hospitals are all supplied with a number of trained nurses from the Hospital Nurses' Institution; but at the Eden Hospital the bulk of the work is said to be done by pupil nurses and pupil dhais, of whom there are 20 and 19 respectively, and the Inspector-General of Civil Hospitals justly remarks that the work of the probationers cannot have been as perfect as that of the trained nurses. During the year 14 pupil nurses and 9 pupil dhais passed out of the Eden Hospital.

15. The invested capital of the Calcutta hospitals shows an increase from Rs. 5,83,000 to Rs. 5,87,000, the increase being chiefly at the Howrah General Hospital. The following table compares the main heads of receipts and expenditure of all the hospitals in the metropolis:—

INCOME.			1892.	1893.
			Rs.	Rs.
Opening balance	...	...	17,020	19,086
From Government	...	...	3,15,296	2,96,478
Local Funds	...	...	33,441	68,717
Municipal Funds	...	...	35,522	36,054
Interest on investments	...	...	26,813	26,719
Sale of securities	...	...	10,000	.....
Receipts from paying patients	...	...	47,675	48,713
Miscellaneous receipts	...	...	1,622	2,198
Subscriptions—				
Europeans	...	...	11,819	8,779
Natives	...	...	1,371	3,706
			1,68,263	1,94,886
Total	...	...	5,00,579	5,10,450
EXPENDITURE.			1892.	1893.
			Rs.	Rs.
On establishment	...	...	1,92,969	2,02,427
„ bazar medicine	...	...	5,389	5,339
„ European „	...	...	31,039	32,688
„ diet	...	...	1,28,717	1,30,829
„ miscellaneous charges	...	...	78,100	76,680
„ buildings and repairs	...	...	36,842	28,939
Invested during the year	...	...	10,714	4,029
			4,83,770	4,80,931
Closing balance	...	...	16,809	29,519
Total	...	...	5,00,579	5,10,450

The difference between the closing balance of the previous year and the opening balance of the year under report, is explained by the inclusion of the figures of the Dufferin Victoria Hospital.

16. Excluding the opening balance, the income of the year rose from Rs. 4,83,559 to Rs. 4,91,364. The increase was large under the head of Local Funds, and is due to a larger receipt from the Hospital Port Dues Fund for the treatment of sick sailors. The receipts from paying patients also rose to the extent of Rs. 1,038. The cost to Government shows a reduction of Rs. 18,818. Subscriptions from Europeans, however, show a considerable decrease, while that from natives rose from Rs. 1,371 to Rs. 3,706. The total expenditure was Rs. 4,80,931, against Rs. 4,83,770 in the previous year. The decrease was chiefly under the head of Buildings and Repairs.

17. There was a little increase under the head of Establishment, both superior and inferior. The cause of this increase has not been explained, but in paragraphs 54 to 57 of the report, the Inspector-General of Civil Hospitals compares the cost of establishment on each patient treated in the different institutions, and shows that the cost was highest in the Presidency General Hospital owing, it is said, to the staff there comprising several highly paid commissioned medical officers, whose entire salary is debited to the hospital, whereas the salaries of most of the officers employed in the Medical College



Hospital, are charged to the College. The variation in the cost of compounders and dressers is said to be due to a difference in book-keeping. The Inspector-General of Civil Hospitals should correct this difference by laying down a sufficient number of heads of expenditure, to which all the institutions should conform.

18. The cost of European medicines also shows an increase of Rs. 1,649, and the comparison instituted by the Inspector-General of Civil Hospitals of the cost per head in the different institutions shows that the cost was higher in the Presidency General Hospital than in the Medical College. The Superintendent is unable to account for this difference, but is convinced that the medicines have been actually used. Considering, however, the high cost of each European and native patient, the Inspector-General of Civil Hospitals thinks that there is room for economy in both these institutions, and the Lieutenant-Governor desires that this conclusion should be enforced as far as possible. The high figures in the Dufferin Hospital are said to be due to the purchase of medicines at a high price in the local market. This defect will be amended by the arrangements recently made for obtaining medicines from England at wholesale prices, and then distributing them to the different institutions according to their requirements.

19. The cost of diet also shows an increase, but the maximum rate fixed for European patients in Government order No. <sup>1-D</sup><sub>24</sub> 4, dated the 4th December 1890, has not been exceeded in any of the institutions except the Campbell Hospital, where small-pox patients are treated, and where the average cost of dieting such patients is not restricted to the above maximum. In the Mayo Hospital, which at one time enjoyed the reputation of being the most economically managed medical institution in Calcutta, the cost of diets for native patients in 1892 (3 annas 8½ pies) exceeded the maximum rate, and the cost in 1893 (annas 3 and 5 pies) is still above the maximum. The Lieutenant-Governor trusts that the Superintendent will devote special attention to the subject, and to Dr. Harvey's remarks in paragraph 60, and endeavour during the current year to win back for the hospital its old reputation.

20. The Lieutenant-Governor regrets that the projected Hospital for South Calcutta, from which he anticipates so much advantage to the sick poor, and the erection of which has more than once been urged by the Government of India, has not been begun during the year under review. Grave difficulties were met with in the selection of a site and in the provision of funds, but it is believed that the first of these has already been surmounted, and the Lieutenant-Governor expects that the improvement of the Provincial finances and the liberality of the Corporation of Calcutta will enable him to commence the building before the close of the current year.

21. Dr. Harvey remarks, in conclusion, that there has been a marked advance of recent years in the general efficiency of the Calcutta Medical Institutions; the work has been better done, material improvements have been introduced everywhere, the patients have been provided with greater comforts, the death-rate has been lowered, and the cost, both to Government and in general, has been diminished. This is valuable testimony from an officer who knows Calcutta well, and who has now returned to it after an absence of about three years. The thanks of the Lieutenant-Governor are due to Surgeon Colonel Harvey for his interesting review of the year's work and for the punctuality with which it has been submitted. The report is a little longer than that of last year, but there is nothing in it which is unnecessarily minute or which the Lieutenant-Governor would like to have had omitted: on the contrary, the addition of paragraphs 53 to 62, in which the proportionate cost of different branches of expenditure is worked out, has much enhanced its value. The Lieutenant-Governor also agrees in the remarks made by the Inspector-General of Civil Hospitals regarding the thorough efficiency of the staff employed in the different institutions, and concurs in the praise bestowed by him on the work done by the physicians at all the Calcutta hospitals—work which, though less striking to the imagination, is probably more important, and benefits a larger number of persons than the skilful feats of the surgeons.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

*Offg. Secretary to the Government of Bengal,*



ADMINISTRATION REPORT OF THE BENGAL METEOROLOGICAL  
DEPARTMENT FOR THE YEAR 1893-94.

THE following is published for general information.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

*The 26th June, 1894.*

*Secy. to the Govt. of Bengal.*

THE Administration Report for the year 1893-94 is intended to give a brief statement of the more important events only of the year, for the full report giving details of the administration of the Department for the previous triennial period appeared last year, and the next full report will be due only in 1896.

2. From the 1st to the 26th of April 1893 the Department was under my control, when I availed myself of 2 months and 22 days' privilege leave, returning to duty on the 18th of July. During this period the Department was under the control of Mr. C. Little. Again from the 5th of August to the 8th of November the Department was in charge of Mr. C. Little, as my services were placed at the disposal of the Government of India to officiate as Meteorological Reporter to the Government of India at Simla during the absence of Mr. J. Eliot on three months' privilege leave. Thus for about six months of the year the Department was under my control, and for the remaining six months under Mr. Little's charge.

3. Again during the year under review the changes in the administration of the Department have been of minor character, and have been confined entirely to steady extension in the work commenced in previous years, and to slight improvements which have been introduced to make previous arrangements work more smoothly. There have been, indeed, no radical changes or changes of principle introduced into the working of the Department in the period under review.

4. The number of meteorological observatories submitting reports to the Bengal Meteorological Department on the 31st March 1894 was 70, or two more than on the corresponding date in 1893. The additions made during the year consist of a third class observatory at Daltonganj in the newly-formed district of Palamau, which commenced to send in observations from 19th April 1893. In addition, also, a voluntary observatory was started at Guntak, through the kindness of Mr. J. C. White, Political Officer in Sikkim. The Guntak observatory was intended to continue the work which had been formerly carried out by the Revd. Father Desgodins at Pedong, the observatory at Pedong having been closed at the end of 1892-93. Rainfall returns are, however, still received from Pedong. The first observations from Guntak were received on 2nd June 1893.

5. The voluntary observatory at Kalimpong, which was started on 1st April 1891, but which was temporarily closed in 1892-93, still remains in abeyance, though efforts were made during the year to re-open it. One other change has taken place in the classification of the observatories, inasmuch as Coconada was raised from a third to a second class observatory from the 1st of May 1893, and under the new arrangement the observer receives a monthly salary of Rs. 23.

6. The second class observatory, which was for many years established at Dacca, was transferred on the 9th of March 1894 to a very similar site at Narainganj. The necessity of the change was due to the removal of the large Telegraph Office from Dacca to Narainganj, only a small combined Postal and Telegraph Office being left at Dacca, and the meteorological observatory at Dacca having always been in charge of the Telegraph Department.

Arrangements indeed were made in October 1893 to transfer the meteorological work to Narainganj, but owing to delays the removal was not carried out till March 1894. A break in the observations at Dacca from 2nd to 8th of October was, however, caused by the removal of the instruments to Narainganj and their retransfer to Dacca.

7. The seventy observatories are arranged under the following heads:— One first class (Imperial) observatory (at Alipore), 16 second class observatories, 39 third class observatories, six voluntary observatories and eight other stations reporting in connection with the storm-warning service of the Bay of Bengal, making 70 observatories altogether.

8. The following table will show the names and distribution of the observatories in question :—

1st class observatory.	2nd class observatories.	3rd class observatories.	Voluntary observatories.	Other observatories reporting to the Department, but not under the control of the Meteorological Reporter, Bengal.	
1	2	3	4	5	
Bengal } Alipore.*	Assam { Dhubri. Sibsagar. Silchar. Berhampore. Burdwan. Chittagong. Cuttack. Darbhanga. Darjeeling. False Point. Hazaribagh. Narainganj. Patna. Saugor Island. Bengal { Madras. Burmah { Akyab. Coconada.	{ Arrah. Balasore. Bankura. Barisal. Bhagalpur. Bogra. Buxar. Chaibassa. Chapra. Comilla. Daltonganj. Dehri. Dinajpur. Faridpur. Gaya. Gumatong. Jalpaiguri. Jessore. Krishnagar. Malda. Midnapore. Bengal—continued. Burmah { Madras. { Cuddalore. Gopalpur. Madras (Port Office). Nellore. Pamban.	{ Motihari. Muzaffarpur. Mymensingh. Naya Dumka. Noakhali. Puri. Purnea. Rampur Boalia. Ranchi. Raniganj. Rangpur. Sirajganj. Bengal—continued. Burmah { Tavoy. Madras { Cuddalore. Gopalpur. Madras (Port Office). Nellore. Pamban.	{ Demagiri. Lungleh. Shortt's Island. Assam. Bengal { Tura. Madras. Vizagapatam.† Sikkim. Madras. Guntak.	{ Bassein. Diamond Island. Moulmein. Rangoon. Burmah { Galle. Trincomallee. Madras. Ceylon. { Masulipatam. Negapatam.

\* Under the direct control of the Meteorological Reporter to the Government of India.

† This observatory is not under the control of the Meteorological Department. It is under the direction of Mrs. A. A. Nursing Rao.

9. The number of stations reporting the daily rainfall to the Bengal Meteorological Department on the 31st of March 1894 was 304. At the close of 1892-93 only 276 stations were reporting the daily rainfall. Hence during the year no less than 28 new rainfall-recording stations were added, the names of which are given below, together with the districts to which they belong :—

*New rainfall recording stations added in 1893-94.*

District.	Station.	District.	Station.
Birbhum	... Labpur.	Sonthal Parganas—concluded.	{ Sarwan. Sarath. Barkope. Bhagya. Mohespur. Sahibganj. Nayagarh. Ranpur. Kurmala Palkot. Tamar. Chainpur. Gaikera. Kalikapur.
Midnapore	... Dantoon.		
Kuch Bihar	... Fulbari.		
Rangpur	... { Peerganj. Gobindganj. Sunderganj. Ekma.	Puri ...	...
Saran	... { Seereepur. Amnour. Basantpur.	Lohardaga	...
Monghyr	... Chupraon.	Singhbhum	...
Sonthal Parganas	... { Assenboni. Katikund. Madhupur.		

10. In addition to the 304 stations from which reports of rainfall are sent in daily, there are 16 other stations situated in rather difficultly accessible places, such as in the west of Chota Nagpur, the Orissa Tributary Mahals, Sikkim, Lushai Hills, &c., which send in rainfall statements for each month



only. These returns are also regularly published, and thus the rainfall records from no less than 320 stations are published by the Bengal Meteorological Department.

11. The distribution of these 320 rainfall stations in the various districts, &c., is shown in the table below. It would appear that the number of recording stations in the great majority of districts is sufficient to give a fairly satisfactory estimate of the distribution of the rainfall and of its variations. In the case of a few districts however, such as Pabna, Faridpur, Bogra, Noakhali, Champaran, and Malda, the number of registering stations might perhaps be increased with advantage:—

*Number of Rainfall-recording Stations in each district in Bengal, &c., on 31st March 1894.*

Burdwan	...	5	Bogra	...	4	Darbhanga	...	5
Birbhum	...	6	Pabna	...	2	Monghyr	...	7
Bankura	...	10	Dacca	...	5	Bhagalpur	...	7
Midnapore	...	8	Mymensingh	...	9	Purnea	...	7
Hooghly	...	3	Faridpur	...	3	Malda	...	4
Howrah	...	3	Backergunge	...	7	Sonthal Parganas	...	17
24-Parganas	...	8	Tippera	...	9	Cuttack	...	9
Nadia	...	5	Noakhali	...	4	Balasore	...	7
Murshidabad	...	8	Chittagong	...	8	Puri	...	9
Jessore	...	5	Lushai Hills	...	3	Hazaribagh	...	9
Khulna	...	5	Patna	...	6	Lohardaga	...	9
Rajshahi	...	5	Gaya	...	9	Palamau	...	4
Dinajpur	...	6	Shahabad	...	13	Manbhum	...	7
Jalpaiguri	...	5	Saran	...	7	Singhbhum	...	6
Darjeeling	...	7	Champaran	...	4	Orissa Tributary Mahals	...	9
Kuch Bihar	...	5	Muzaffarpur	...	7	Sikkim	...	1
Rangpur	...	8				Chittagong Hill Tracts	...	1

320 stations in all.

12. It is much to be regretted that only 12 observatories were able to be visited during the year 1893-94, a much smaller number than has been the rule for many years past. It has, however, been pointed out in several previous Administration Reports that with the present arrangements only a very limited amount of inspection of the Bengal observatories can be performed. The Bengal Reporter, who is mainly charged with the inspection of the Bengal observatories, is held responsible for warning the coast ports all round the Bay of Bengal of the occurrence of all storms throughout the whole year. Hence he can only leave Calcutta during such brief intervals when severe storms or bad weather are not expected in any part of the Bay, and when also he can arrange for the performance of his duties in Calcutta by some other responsible officer of the Meteorological Department. Again, too, the Bengal Reporter is only a half-time officer, and has to combine his meteorological duties with those as Professor in the Presidency College. He can therefore only do inspection work during the College vacations, and unfortunately these fall just at the time when severe storms and cyclones in the Bay are most numerous. Hence the Bengal Reporter can scarcely do any inspection work at all. During the past year, indeed, the Reporter did no inspection work in Bengal, and the work of visiting the meteorological stations had to be delegated to Babu Jati Lal De, a clerk in the Calcutta Meteorological Office, who visited 12 stations. Another and nearly as powerful a reason why little inspection of Bengal stations could be done in 1893-94 was that there were no funds available for more than was actually done. The grants for travelling allowances in the Meteorological Department have since 1890-91 been all amalgamated in the Indian Meteorological Budget, and during the last year exceptional expenditure was required for travelling purposes in other provinces, such as in Madras, in Burma, &c., and hence the inspection of the Bengal stations has had to be postponed. Indeed, the total cost of the visits to the 12 Bengal observatories in 1893-94 only amounted to Rs. 334.

13. It may here be remarked that during the past year the Government of India has temporarily sanctioned the plan of allowing a clerk from the head



Meteorological Office at Calcutta and other offices to proceed to observatories on visits of instruction, and it is on such visits that the state of the observatory is brought to light.

14. The amount of inspection done during the year under review has undoubtedly been less than is necessary to keep the observatories up to the proper standard of excellence, and in certain cases it would appear that some of the observers have been gradually drifting into a state of slackness from which only thorough and repeated inspection can rouse them. It is, however, but fair to say that all the visits made by the Instructor resulted in considerable improvement in the work at the observatories, and the work done by the Instructor in his tours was excellent.

15. The following observatories under the Bengal Reporter were visited during the year under review :—

Station.				Visited on
Arrah	...	...	...	17th and 18th September 1893.
Barisal	...	...	...	18th and 19th August 1893.
Bogra	...	...	...	4th and 5th March 1894.
Chaibassa	...	...	...	6th and 7th July 1893.
Dacca	...	...	...	7th to 12th October 1893.
Dehri	...	...	...	20th to 24th September 1893.
Dhubri	...	...	...	9th and 10th March 1894.
Faridpur	...	...	...	28th to 30th August 1893.
Rampur Boalia	...	...	...	1st and 2nd March 1894.
Rangpur	...	...	...	7th March 1894.
Raniganj	...	...	...	14th and 15th September 1893.
Sibsagar	...	...	...	15th to 21st March 1894.

16. As the result of these visits it was found that the observatories at Bogra, Dacca, Dhubri, and Rampur Boalia were in good order, those at Arrah, Barisal and Chaibassa were in fair order, those at Dehri, Rangpur and Sib-sagar in bad order, and those at Raniganj and Faridpur in very bad order.

17. In the case of the greater number of observatories in Bengal, as they were not able to be visited during the year, the only test of the nature of their working which can be applied is by a careful study of the observations which have been sent in. In the following brief review of the work at the observatories of the different classes, this test has been mainly applied.

18. It may be here stated that the work at the observatories, the time of observations, and the nature of the instruments observed have been practically the same in the year 1893-94 as in the previous four or five years, and there have been no changes made in this direction in the routine of the Department.

19. *First class observatory.*—The only observatory of this class is at Alipore, and is under the direct control of the Second Assistant to the Meteorological Reporter to the Government of India. The observations made at Alipore are supplied daily to the Bengal Reporter, and in addition whenever extra observations are required for storm-warning purposes, they are always accurately taken and promptly supplied.

20. *Second class observatories.*—Three out of the sixteen observatories of this class only were inspected during the year, namely, Dacca, Dhubri and Sib-sagar. When visited Dacca was in very good order, and throughout the greater part of the year the observations sent in from this place and during part of March from Narainganj were of a high order of accuracy. Dhubri was also in good order, and the observations sent in from this station have also been generally very accurate. At Sib-sagar, on the other hand, the observations which have been received for the greater part of the year have been of little value, and the visit of the Instructor showed there were many points in which the observatory and the observer's methods were faulty. Hence the observer's pay was stopped for a considerable period. Since the visit, however, of the Instructor, the character of the observations has improved very materially.

21. In the case of the other second class stations, the observations sent in from Bankipore, Berhampore, Burdwan, Coconada, Cuttack, Darjeeling, False Point, Hazaribagh and Saugor Island were very good throughout the year, and appeared to show the observatories were in very good order. In the case of Akyab, Chittagong, Darbhanga and Silchar, on the other hand, the observations

were not of such a high order of accuracy as they might have been, and probably the observatories were not looked after quite so well as they should be.

22. *Third class observatories.*—Only nine out of the thirty-nine third class stations were visited during the year, and the brief results of their inspection have been given. Judged only by the records received, very good and correct observations were sent in throughout the year from the following observatories:—Balasore, Gopalpur, Krishnagar, Madras (Port Office), Midnapore, Mymensingh, Naya Dumka, Rampur Boalia, Sirajganj, and Tavoy.

23. The observations were fairly good, and in the great majority of cases accurate from the following observatories:—Arrah, Bankura, Bhagalpur, Bogra, Buxar, Chapra, Dinajpur, Jessore, Malda, Motihari, Nellore, Pamban and Puri.

24. The observations were indifferent in quality, containing rather numerous mistakes as sent in by the observers at Chaibassa, Comilla, Gnatong, Jalpai-guri, Purnea, Ranchi and Rangpur.

25. The observations were bad, and contained a very large number of mistakes as sent in by the observers at the following stations:—Barisal, Cuddalore, Daltonganj, Dehri, Faridpur, Gaya, Muzaffarpur, Noakhali and Raniganj.

26. *Voluntary observatories.*—The observations received from Demagiri, Lungleh, and Tura have as usual not been very accurate, and have hence been of comparatively little value. At Shortt's Island, however, Mr. Tasker has continued to take excellent observations both daily and during stormy weather, when numerous extra observations have been made. In the latter case the observations have been of particular value, and Mr. Tasker was awarded a grant of Rs. 60 by the Meteorological Reporter to the Government of India out of the special storm observation fund. The observatory at Vizagapatam, under the direction of Mrs. A. A. Nursing Rao, continues to send in most excellent series of observations, and also sends extra observations of great value during stormy weather, and the thanks of the Department are again due to Mrs. Nursing Rao for her valuable assistance. In the case of the Guntak observatory, the observations sent in have, on the whole, been very accurate, and this observatory will prove very useful as representing an area, of which the meteorology is at present almost unknown.

27. The system of awarding small sums of money as an additional remuneration to those observers who take and submit special meteorological reports during stormy and unsettled weather has been continued during the present year by the India Meteorological Office, and several of the Bengal observers have competed for these awards. In addition to the observer at Shortt's Island, whose case has just been alluded to, the following observers under the Bengal Reporter have received small rewards for the good quality of their extra work:—

*Bengal and Assam.*—Barisal, Balasore, Berhampore, Burdwan, Chittagong, Comilla, Dacca, Darjeeling, Dhubri, Faridpur, False Point, Gnatong, Hazaribagh, Mymensingh, Patna, and Saugor Island.

*Madras.*—Coconada, Cuddalore, Gopalpur, Madras (Port Office), Nellore and Pamban.

28. The rain-gauge stations have on the whole worked satisfactorily during the year, and there have been only a few cases where the returns have been shown to be incorrect. There has been, however, a considerable amount of slackness in the despatch of the returns, particularly of the weekly reports, during such periods when there has been either no rainfall or only small falls at intervals. As the rain-registering officers, however, receive no remuneration for their rainfall work, it is difficult to devise any scheme by which careless observers can be made to obey the rules of the Department.

29. The amount of inspection of the rain-gauge stations during the year 1893-94 appears to have been very small. The system of inspection was started in the year 1891-92, and on the 23rd of June 1891 the Government of Bengal in their letter No. 3T.R. directed all District Officers to see that the rain-gauge stations in their districts were inspected. Rules for the guidance of local officers inspecting rain-gauges were prepared, post-card inspection report forms were introduced, and a considerable number of inspecting instruments (measuring gauges and spirit levels) were supplied. The inspections were ordered to be carried out whenever any station at which a rain-gauge was maintained was visited either by the Collector himself or by the Deputy Magistrate

Work at and inspection of rain-gauges.



or the Civil Surgeon. In the year of the introduction of these rules (1891-92), even though the rules were only nine months in force, 102 reports of inspections of various rain-gauges were received by the Department. In the second year (1892-93) the number of reports had fallen to 58, while in the year now under review, and which is the third year of the system, only 19 rain-gauges out of the 320 existing were inspected and reports sent in to the Department. It would therefore almost appear that the orders of the 23rd of June 1891 had been to a great extent overlooked or perhaps forgotten.

30. A few cases of improper exposure of rain-gauges and of defective instruments have, however, been brought to light during the year, and these have been remedied as far as possible. It is believed that on the whole the rain-gauge stations are working well. The exposure of the instruments as far as can be tested by correspondence is good in the great majority of cases, and the critical examination of the returns received from the stations goes to prove that considerable care is taken in the work of registration.

31. The short Annual Report of the meteorology of Bengal in the year 1892 was prepared as usual, and submitted on the 28th June 1893 for incorporation in the Bengal Administration Report. It was illustrated by the usual number of charts.

The report on the meteorology of Bengal for the monsoon season of 1893 was prepared and submitted to Government on the 2nd January 1894. It was also illustrated by maps. The report itself was published in the *Calcutta Gazette* of the 10th January 1894.

32. *The Monthly Meteorological Reports* for Bengal and Assam have been regularly published about the 10th to the 15th of the month following that dealt with. These reports give the meteorological and full rainfall statistics for Bengal and the meteorological data only for Assam, together with a brief discussion and summary. Monthly charts of the rainfall distribution, its variation from the normal, etc., and also for the monsoon season are prepared and submitted to Government and to the Sanitary Commissioner. The form in which these monthly reports is published has been unchanged throughout the year. The report is, however, rather larger than it was, and now contains the observations from the meteorological observatory at Daltonganj, so that meteorological observations are given for 49 stations, while in the case of the rainfall statistics there are 44 stations more than in former years, and returns are now published for 320 stations.

33. *The Weekly Meteorological Reports* for the weeks ending 8 A.M. on Saturdays have been published regularly throughout the year. These reports give similar data and summaries to those contained in the monthly reports, except that they are not quite so complete, particularly in the case of the rainfall data, as many stations are so far away that their postal returns do not arrive in time to be included in the report, which is published only four days after the actual observations are made. There has also been no practical change in these reports during the year except for the inclusion of Daltonganj and sundry rainfall-recording stations.

34. *The Bengal Daily Weather Report* dealing with the meteorology of the inland stations in Bengal and Assam was published during the period 29th April to 14th November 1893. Advantage was taken of the station of Malda being connected by telegraph to include this station in the daily report, and this report now contains the observations made at 48 stations. No practical change also was made in this report. Of this report 109 copies were issued to Government officers and 19 copies to private subscribers at the rate of Rs. 2-8 per month.

35. *The Bay of Bengal Daily Weather Report* with its accompanying chart was issued daily throughout the year, Sundays and holidays included, at about 10-30 to 11 A.M. This report is issued in connection with the Storm Signal Service, and gives 8 A.M. data for the stations round the Bay and neighbouring coast area. It was issued to 49 Government officials free of charge and to 28 subscribers at the rate of Rs. 2 per month. The subscriptions received during the year have been sufficient to pay the cost of the lithographic establishment, repairs to presses, etc., and at the close of the year there was a considerable cash balance in hand, which is kept to provide new presses, &c., when required. No change was made in the form of this report during the year, except that at its close the station of Narainganj took the place of Dacca.



36. In connection with the Bay of Bengal weather signal service immediately after the Bay report has been prepared, a daily telegram is despatched to Saugor Island (at about 10-30 A.M.), consisting of a code message of four signal flags, which flags are hoisted at the Saugor Island lighthouse to every passing vessel outward bound. These flag signals give a brief description of the weather at 8 A.M. of the day in question in each of four sections of the Bay, the Bay having been divided for the purposes of this code into four parts. Hence every vessel passing out to sea after about 11 A.M. is informed of the weather conditions of the Bay on the same morning, so far as they can be judged from the reports received. The Port Commissioners, Calcutta, pay the sum of Rs. 5 monthly to the khalasis at Saugor Island for their extra work in hoisting these signals.

37. In connection with the same report urgent telegrams are sent out daily to various ports round the Bay of Bengal, giving by means of a code a brief description of the weather conditions, pressure changes, wind directions, force, &c., &c., in each of eight sections into which the Bay is divided in this code. Telegrams of this kind are sent daily throughout the year to Madras, Akyab, Rangoon, Negapatam, and Coconada, and for portions of the year to Chittagong. In addition, too, the flag signal messages as described in the previous paragraph are now added to the telegrams to Rangoon, Negapatam, Coconada, and Madras, so that the shipping off these ports can be warned of the weather in the Bay by flag signalling in the same way as in the case of vessels passing Saugor Island.

38. The system of forwarding meteorological information from the pilot brigs at the Sandheads to the Meteorological Office by flag hoists, shown by the pilots of inward-bound vessels as they pass Saugor Island lighthouse, has been continued. Fifty-seven code telegrams were received in this way during the year, and in addition 339 post-cards were received from the pilot brigs giving the summary of these observations taken daily at the Sandheads. Mr. Marshall, the special pilot on the steamers passing from Calcutta to Rangoon, has also been good enough to send in throughout the year his special sets of observations taken on these voyages, and these have been found to be very accurate and reliable.

39. In the report for the last year it was noticed that through the kindness of Sir J. L. Mackay arrangements had been made by which, working with a special code, the Captains of the British India steam-vessels on arriving in various ports could telegraph to the Meteorological Office a summary of the weather they had experienced during their voyage. This plan has worked very successfully during the year 1893-94, and 207 telegrams and other reports of such voyages were received in this way during the year.

40. The working of the Storm-Signal Service has been unaltered during the year, no stations having been added to the list of those receiving warnings, nor have any changes or additions been made to the signals employed.

41. The year on the whole was moderately stormy, but the full description of the storms is reserved for the Annual Report on the meteorology of the year 1893. The most noticeable of the storms during the year was one which occurred at the end of May 1893 in front of a large advance of south-west monsoon winds up the Bay. The first indications of the formation of the storm were seen on the evening of May 21st. The storm slowly developed from that date up till the evening of the 24th and morning of the 25th, when it formed a cyclone with a calm centre and an inner area of hurricane winds at some little distance from the Orissa coast. It advanced at first in a northerly direction, and crossed the coast a short distance to the west of Saugor Island at 4-30 A.M. of the 26th. It advanced to the west of Calcutta, and between 4 and 5 P.M. of the 26th was between Calcutta and Burdwan, when it suddenly recurved and afterwards moved in an east-north-easterly direction, breaking up in Cachar on the 29th. This cyclone, though small, was the most severe storm that has visited the head of the Bay in the month of May for the past 25 or 30 years. It was also remarkable for the excessive rain it gave to the districts over which it passed.

42. The dates of the principal storms occurring during the year are given in the first of the two following tables, and the action taken in the matter of

issuing storm warnings and hoisting storm signals is indicated in the second of these tables:—

*Table giving a brief statement of the storms which affected the Bay of Bengal coasts during the year 1893.*

No. of storm.	Period of depression or storm.	Character of storm.	Coast affected.
1	2	3	4
1	April 25th to 27th ...	Small cyclonic storm formed in the Andaman sea on the 25th, and moving in a north-easterly direction, passed over Rangoon on the 27th, causing stormy weather in the east of the Bay and heavy rainfall in Burma.	Burma coast.
2	May 20th to 26th ...	Very severe cyclone formed off the Orissa coast, and moving slowly northwards into the north-west angle of the Bay, crossed the coast a few miles west of Saugor Island on the early morning of the 26th. It afterwards recurved and broke up in Cachar. It gave excessively heavy rain to the districts over which it passed.	Orissa and Bengal coasts.
3	June 11th to 15th ...	Small storm formed to the west or north-west of the Andaman Islands about the 11th or 12th June, and advancing slowly across the Bay in a westerly or west-north-westerly direction, crossed the coast between Vizagapatam and Cochinada soon after noon on the 15th, giving stormy weather and heavy rain.	Madras coast.
4	July 29th to August 1st ...	Small storm formed on July 29th in the north-west angle of the Bay, where it remained till nearly the end of July, slowly developing and becoming of moderate importance. It crossed the coast between Saugor Island and False Point on the 1st of August.	Orissa and Bengal coasts.
5	August 31st to 3rd September.	Small depression formed in the north of the Bay, and moving north westwards, intensified moderately on the 2nd, crossed the coast between Saugor Island and Balasore on the 3rd.	Orissa and Bengal coasts.
6	September 8th to 11th ...	Rather severe storm formed in the north of the Bay on the 9th, and after developing rather rapidly in its course, crossed the coast between Saugor Island and Balasore on the 11th. This storm gave heavy rainfall in Bengal.	Ditto.
7	Do. 20th to 23rd ...	Slight depression formed in the north of the Bay. It advanced in a north-westerly direction, and after developing rather rapidly into a severe storm, crossed the coast near Puri on the early morning of the 23rd.	Ditto.
8	October 19th to 22nd ...	Small but severe cyclone formed in the south-east of the Bay, and advancing up the Bay first in a north-westerly, and finally in a north-easterly or east-north-easterly direction, struck the coast near Noakhally on the 22nd.	Bengal and Burma coasts.
9	'Do. 24th to 28th ...	Small cyclonic storm formed in the centre of the Bay, and advancing in a north-easterly direction, crossed the coast between Diamond Island and Akyab on the 28th.	Arakan and South Burma coasts.
10	November 4th to 6th ...	Storm of considerable intensity formed in the south-west of the Bay, and moving in a north-westerly direction, crossed the Madras coast to the south of Madras on the morning of the 6th.	Coromandel coast.



Table showing the action taken by the Calcutta Meteorological Office in warning the coasts affected by the storms enumerated in the previous table.

Storm number.	HOISTING OF STORM SIGNALS.			WARNING OF PORTS BY CAUTIONARY TELEGRAMS.	
	Ports ordered to hoist signals.	When hoisted.	When lowered.	Ports warned by cautionary telegrams.	Time and date of despatch of cautionary telegrams.
1	2	3	4	5	6
1	Saugor Island ...	Noon of 22nd May	5-20 A.M. of 27th May	Rangoon ...	11-5 A.M. of 27th April.
	Budge-Budge ...	12-10 P.M. of 22nd "	9-30 " of 27th "	Balasore, Puri ...	10-55 A.M. of 22nd May; 10-15 A.M. of 23rd; 10-35 A.M. of 24th; 0-25 A.M. of 25th; 10-30 A.M. of 26th May.
	Mud Point ...	12-11 " of 22nd "	4-40 " of 27th "	False Point, Chandbally.	11-3 A.M. of 22nd; 10-22 A.M. of 23rd; 10-40 A.M. of 24th; 10-35 A.M. of 25th; 10-30 A.M. of 26th May.
	Diamond Harbour ...	12-15 " of 22nd "	4-35 " of 27th "	Gopalpur ...	11-2 A.M. of 22nd; 10-22 A.M. of 23rd; 10-50 A.M. of 24th; 10-35 A.M. of 25th; 10-30 A.M. of 26th May.
	Calcutta ...	12-25 " of 22nd "	6-20 " of 27th "		
2	False Point ...	Ordered to hoist signal at 10-40 A.M. of 24th, but not hoisted owing to non-receipt of the orders till night of 26th.		Chittagong, Narayanganj.	10-36 A.M. of 26th May.
	Chandbali ...	12-40 P.M. of 24th May	Flagstaff broken at 6 A.M., 25th, and signal could not be displayed afterwards.		
	Balasore ...	1 " of 24th "	7-30 A.M. of 27th May		
	Puri ...	3-28 " of 24th "	6-13 " of 27th "		
	Narayanganj ...	Noon of 26th "	11 " of 29th "		
	Diamond Harbour ...	11-40 A.M. of 14th June	4-40 " of 16th June	Gopalpur, Bimlipatam, Vizagapatam, Cocanada, Masulipatam.	16-35 A.M. of 13th; 10-30 A.M. of 14th; 10-22 A.M. of 15th; 10-20 A.M. of 16th June.
	Mud Point ...	11-50 " of 14th "	4-36 " of 16th "		
	Saugor Island ...	11-55 " of 14th "	4-28 " of 16th "		
	Calcutta ...	Noon of 14th "	6-45 " of 16th "		
	Budge-Budge ...	Noon of 14th "	4-30 " of 16th "		
	Puri ...	12-30 P.M. of 14th "	11-54 " of 16th "		
	False Point ...	1-30 " of 14th "	11 " of 16th "		
3					
4					
	Mud Point ...	11-12 A.M. of 2nd Sept.	4-40 P.M. of 3rd Sept.	Gopalpur, False Point, Chandbali, Balasore, Puri...	10-52 A.M. of 31st July.
	Saugor Island ...	11-15 " of 2nd "	4-40 " of 3rd "		10-54 A.M. of 31st July.
5					
	Budge-Budge ...	11-18 " of 2nd "	4-30 " of 3rd "	Chandbali, False Point	10-22 A.M. of 1st; 10-55 A.M. of 2nd; 10-25 A.M. of 3rd September.
	Diamond Harbour ...	11-20 " of 2nd "	4-40 " of 3rd "	Balasore, Puri...	10-28 A.M. of 1st; 10-45 A.M. of 2nd; 10-33 A.M. of 3rd September.
	Calcutta ...	11-40 " of 2nd "	5-55 " of 3rd "		
	Saugor Island ...	11-7 " of 9th "	4-25 " of 11th "	Chittagong ...	11-10 A.M. of 2nd; 10-25 A.M. of 3rd September.
6					
	Budge-Budge ...	11-10 " of 9th "	4-20 " of 11th "	Akyab, Chittagong, Chandbali, False Point, Gopalpur.	10-27 A.M. of 9th; 11-2 A.M. of 10th; 10-10 A.M. of 11th September.
	Mud Point ...	11-15 " of 9th "	4-20 " of 11th "	Balasore, Puri...	10-35 A.M. of 9th; 11 A.M. of 10th; 10-20 A.M. of 11th September.
	Diamond Harbour ...	11-24 " of 9th "	4-25 " of 11th "		
7					
	Budge-Budge ...	5-50 " of 23rd "	10-14 " of 23rd "	Chandbali, False Point.	10-20 A.M. of 22nd; 3-50 P.M. of 22nd; 5 A.M. of 23rd; 10-25 A.M. of 23rd September.
	Saugor Island ...	6 " of 23rd "	10-45 " of 23rd "	Gopalpur ...	10-20 A.M. of 22nd; 3-50 P.M. of 22nd; 5-5 A.M. of 23rd; 10-25 A.M. of 23rd September.
	Mud Point ...	6-5 " of 23rd "	10-55 " of 23rd "	Puri ...	10-35 A.M. of 22nd; 3-55 P.M. of 22nd; 5 A.M. of 23rd; 10-30 A.M. of 23rd September.
	Diamond Harbour ...	6-16 " of 23rd "	10-40 " of 23rd "	Balasore ...	10-35 A.M. of 22nd; 5 A.M. of 23rd; 10-30 A.M. of 23rd September.
	Calcutta ...	6-40 " of 23rd "	12-30 A.M. of 24th "		
	Chandbali ...	6-40 " of 23rd "	6-35 " of 24th "		
	Balasore ...	9-15 " of 23rd "	5 " of 24th "		
	False Point ...	9-30 " of 23rd "	10-30 P.M. of 23rd "		
	Puri ...	11 " of 23rd "	8-20 A.M. of 24th "		
	Mud Point ...	4-45 " of 21st Oct.	4-5 P.M. of 22nd Oct.		
	Saugor Island ...	5-40 " of 21st "	4-1 " of 22nd "	Gopalpur, Bimlipatam, Vizagapatam, Cocanada, Masulipatam.	10-20 A.M. of 21st; 10-24 A.M. of 22nd October.
	Diamond Harbour ...	5-42 " of 21st "	3-55 " of 22nd "		
	Budge-Budge ...	5-50 " of 21st "	4-5 " of 22nd "		
	Chandbali ...	6-55 " of 21st "	3-55 " of 22nd "		
8					
	Puri ...	7-15 " of 21st "	4-35 " of 22nd "	Madras ...	10-24 A.M. of 21st; 10-26 A.M. of 22nd October.
	False Point ...	8 " of 21st "	3-15 A.M. of 22nd "	Chandbali, False Point.	10-29 A.M. of 21st; 10-5 A.M. of 22nd October.
	Calcutta ...	9-5 " of 21st "	6 P.M. of 22nd "	Balasore, Puri...	10-33 A.M. of 21st; 10-10 A.M. of 22nd October.
	Balasore ...	2-35 P.M. of 21st "	12-15 " of 22nd "	Chittagong, Ak-yab.	8-35 A.M. of 22nd October.
	Chittagong ...	11-16 A.M. of 22nd "	10 " of 22nd "		



Storm number.	HOISTING OF STORM SIGNALS.			WARNING OF PORTS BY CAUTIONARY TELEGRAMS.	
	Ports ordered to hoist signals.	When hoisted.	When lowered.	Ports warned by cautionary telegrams.	Time and date of despatch of cautionary telegrams.
1	2	3	4	5	6
9				Gopalpur, Bimlipatam, Vizagapatam, Cocanada, Masulipatam.	10-40 A.M. of 27th; 11-25 A.M. of 28th October.
				Madras ... ..	10-50 A.M. of 27th October.
				Chittagong ... ..	1-40 P.M. of 28th; 3-20 A.M. of 28th; 10-35 A.M. of 28th; 8-55 A.M. of 29th October.
				Akyab ... ..	3-20 A.M. and 10-35 A.M. of 28th October.
10				False Point, Chandbali.	3-20 A.M. and 11-25 A.M. of 28th October.
				Balasore, Puri ...	3-22 A.M. and 11-25 A.M. of 28th October.
				Rangoon ... ..	3-27 A.M. and 10-35 A.M. of 28th October.
				Bassein ... ..	10-35 A.M. of 28th October.
				Negapatam, Tuticorin, Pamban.	10-40 A.M. of 5th; 10-40 A.M. of 6th November.
				Madras ... ..	10-45 A.M. of 5th; 10-50 A.M. of 6th November.

43. The staff of the Meteorological Office has remained practically unchanged throughout the year. Under the able Office Establishment. superintendence of the Head Clerk, Babu Fanindra Mohan Basu, the office has worked smoothly and very efficiently, and this has enabled the numerous reports, returns, maps, etc., published by this Department, to be issued regularly and with great punctuality throughout the year.

METEOROLOGICAL OFFICE;  
CALCUTTA,  
The 25th of May 1894.

A. PEDLER, F.R.S., F.I.C., F.C.S.,  
*Meteorological Reporter to the Government of Bengal.*

## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 23rd June, 1894.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
<b>BENGAL.</b>			
BURDWAN DIV.	1 Burdwan June 23, '94	1.06	Weather—damp and cool. Sowing of <i>aman</i> is progressing. More rain wanted in parts. Fodder and water sufficient. Prices of common rice— Srs. Burdwan ... 14 to 18 Kalna ... 10 to 14 Katwa ... 14½ Raniganj ... 14½ } per rupee.
	Kalna ...	4.82	
	Katwa ...	0.57	
	Raniganj ...	1.01	
	2 Birbhum „ 23, '94	2.77	
	Rampur Hât ...	2.67	Weather—cloudy. Sowing of paddy and planting of sugarcane going on. <i>Til</i> doing well. Price of common rice 14 to 17 seers per rupee in the Sadar subdivision and 14 to 18½ seers in the Rampur Hât subdivision. Fodder and water sufficient.
	3 Bankura „ 23, '94	2.75	Weather—seasonable, rather cool. Cultivation going on. Prices of common rice:— Srs. Bankura ... 16½ Vishnupur ... 16½ } per rupee.
	Vishnupur ...	4.19	
	4 Midnapore „ 23, '94	1.79	Weather—seasonable. Prospects continue good. Standing crops very much improved. Prices of common rice:— Srs. Sadar ... 14 Contai ... 15 Tamluk ... 13 Ghatal ... 14 to 15 } per rupee.
	5 Hooghly „ 23, '94	0.96	Ordinary monsoon weather. Cultivation proceeding. <i>Aus</i> , jute and sugarcane doing well. Prices of common rice:— Srs. Sadar ... 12 Serampore ... 11½ to 13 Jahanabad ... 14 to 15 } per rupee.
	Serampore ...	1.78	
	Jahanabad ...	2.62	
	6 Howrah „ 23, '94	2.63	Weather—showery and close. Prospects of crops favourable. Prices continue normal. Common rice sells at— Srs. Howrah ... 10 Ulubaria ... 12 to 13 } per rupee.
	Ulubaria ..	4.27	
	7 24 Parganas „ 23, '94	2.88	Weather—cloudy with occasional rain. <i>Aus</i> and jute thriving well. Sowing of <i>aman</i> paddy continues. Condition of cattle good. Fodder and water sufficient. Rice sells at— Srs. c. Sadar ... 11 to 13 4 Barasat ... 11 14 Basirhat ... 13 5 Diamond Harbour ... 13 0 } per rupee.
PRESIDENCY DIV.	8 Nadia „ 23, '94	1.58	Weather—seasonable. Prospects of all standing crops good, and the present weather is very favourable. Prices rising. Rice now selling at 11½ to 12½ seers per rupee.
	Kushtia ...	2.32	
	Chuadaga ...	0.22	
	Meherpur ...	1.06	
	Ranagha ...	1.90	
	9 Murshidabad „ 23, '94	2.04	Weather—hot and rainy and cloudy. The recent rain has done much good to the standing crops. Ploughing and sowing nearly completed. Jute is being sown. Planting of sugarcane going on. No want of fodder. No cattle-disease reported. Prices continue normal. Common rice sells at 13 seers per rupee.
	10 Jessore „ 23, '94	0.77	Weather—hot and cloudy with occasional rain. Harvesting of <i>til</i> over. Prospects of <i>aus</i> , <i>aman</i> , jute and sugarcane fair. Harvesting of <i>aus</i> has commenced in the Salikha outpost. Fodder and water sufficient. Prices of common rice:— Srs. c. Sadar ... 12 to 13 0 Jhenida ... 12 0 Magura ... 11 8 Narail ... 11 7 Bangaon ... 10 to 13 0 } per rupee.
	Jhenida ...	1.83	
	Magura ...	3.71	
	Narail ...	1.13	
	Bangaon ...	1.80	
	11 Khulna „ 23, '94	1.85	Weather—showery. <i>Aus</i> looks well. Transplantation of <i>aman</i> has commenced. Some of the jute looks well, but in parts of Satkhira subdivision it withered for want of early rain. Rice sells from 11 seers 6 chitaks to 14 seers per rupee. Fodder sufficient. Water-supply improved in Satkhira and sufficient elsewhere.
	Bagerhat ...	1.12	
	Satkhira ...	2.76	

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concl'd.			
RAJSHAHI DIVN.	12 Rajshahi June 23, '94	0.38	Weather—showery and seasonable. More rain much wanted, particularly in Naugaoon, for the <i>aus</i> and <i>aman</i> rice; other crops doing well. There is abundance of water and fodder. No cattle-disease. Rice selling from 11 to 13½ seers per rupee.
	Nator ...	0.30	
	Naugaoon ...	Nli	
	13 Dinajpur „ 23, '94	0.58	Weather—hot and cloudy. Cultivation of <i>haimanti</i> going on. Standing crops doing well. No outbreak of cattle-disease. Fodder and drinking water sufficient. Rice selling from 13 to 15 seers per rupee.
	Thakurgaon ...	1.75	
	14 Jalpaiguri „ 23, '94	6.70	Weather—seasonable. Prospects of standing crops continue good. Lands being prepared for <i>haimanti</i> paddy. Common rice sells at 13 seers per rupee. Fodder and water-supply sufficient. Some cases of cattle-disease reported from Alipur subdivision.
	15 Darjeeling „ 23, '94	3.67	Weather—seasonable in the Hills with breaks of fine weather. Hot in the Terai. <i>In the hills</i> :— <i>Bhutta</i> , potatoes, <i>shama</i> , and <i>kangni</i> coming to maturity. <i>Marua</i> and <i>bhadoi</i> rice progressing favourably. <i>Aghani</i> rice and <i>bara marua</i> being transplanted. <i>In the Terai</i> :—Jute and <i>bhadoi</i> rice doing well. <i>Aghani</i> seedlings progressing. Prices of coarse rice :—
	Siliguri ...	2.30	
DACCA DIVN.	16 Rangpur „ 23, '94	2.40	Weather—hot and cloudy with occasional showers. Harvesting of <i>aus</i> and jute going on in some places. The lowlands are being prepared for <i>aman</i> paddy. More rain is wanted. Common rice 10 to 14 seers per rupee.
	Kurigaon ...	1.48	
	Gaibanda ...	0.76	
	Nilphamari ...	2.64	
	17 Bogra „ 23, '94	0.06	Weather—cloudy with strong wind blowing from the east. Transplantation of <i>aman</i> not yet commenced for want of rain. Standing crops including <i>aus dhan</i> suffering from the same cause. Common rice selling at 12 seers per rupee. Fodder and water sufficient.
	Sherpur ...	0.19	
	Naukhila ...	0.26	
	18 Pabna „ 23, '94	2.05	Weather—cloudy and rainy with high south-easterly wind in the afternoons. Rainfall in the Sadar subdivision sufficient. More rain wanted in the Sirajganj subdivision. Prospects of standing crops favourable. Common rice sells at 10½ to 13 seers per rupee in the Sirajganj subdivision and 12 seers per rupee in the Sadar subdivision. Fodder and water-supply sufficient.
CHITTAGONG DIVN.	19 Dacca „ 23, '94	1.70	Weather—cloudy and rainy. Harvesting of jute commenced in lowlands. Prospects of standing crops good. Common rice selling from 8 to 10 seers per rupee. Fodder available. No cattle-disease.
	20 Mymensingh „ 23, '94	1.27	Weather—hot. Prospects of standing crops good. Common rice sells at 10 seers per rupee. Condition of cattle good. Supply of fodder sufficient.
	21 Faridpur „ 23, '94	2.56	Weather—seasonable. Prospects of crops good. Price of rice 10 to 12 seers per rupee. Fodder abundant.
	Goalundo ...	2.05	
	Madaripur ...	2.85	
	22 Backergunge „ 23, '94	3.05	Weather—seasonable. State and prospects of crops fair. Common rice sells from 10 to 12 seers per rupee. Fodder and water sufficient.
	Pirojpur ...	1.62	
	Patuakhali ...	2.46	
	Bhola ...	1.45	
CHITTAGONG DIVN.	23 Tippera „ 23, '94	1.13	Weather—seasonable. State of standing crops very good. <i>Aus</i> is being reaped in small quantities in parts of the Brahmanbaria subdivision. Rice sells at 9 to 11 seers per rupee. It is highest in Chandina and lowest in Laksham—both in the Sadar division. At Brahmanbaria it is selling from 9½ to 10½ seers, at Chandpur 10 seers, and at Hajiganj at 10½ per rupee.
	24 Noakhali „ 23, '94	3.75	Weather—seasonable. Prospects of crops hopeful. More rain wanted. No cattle-disease. Fodder and water sufficient. Prices of common rice :—
CHITTAGONG DIVN.	25 Chittagong „ 23, '94	1.49	Weather—seasonable. Harvesting of <i>pania aus</i> nearly over. The late heavy rain has somewhat interfered with ploughing and sowing. Prospects fair. Prices steady. Water and fodder sufficient.



No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
26	Patna June 23, '94	0.26	Weather—cloudy with high east wind occasionally. The rainfall of the week, though very insufficient in the north-west of the district, has done much good by facilitating the ploughing and sowing of <i>bhadoi</i> crops. Milllets are still being harvested. Transplantation of <i>marua</i> is going on. Fodder and water for cattle ample. Prices generally normal. Common rice sells at— Srs. Sadar ... .. 14½ Barh ... .. 13 Bihar ... .. 16 Dinapore ... .. 15½ } per rupee.
	Barh ...	2.50	
	Bihar ...	1.72	
	Dinapore ...	0.26	
27	Gaya „ 23, '94	4.34	Weather—cloudy and rainy. There has been rain, but more is wanted. Ploughing and sowing of paddy, maize and <i>marua</i> commenced. Rice sells at— Srs. Sadar ... .. 12 Aurangabad ... .. 14 Jahanabad ... .. 14 Nawada ... .. 16 } per rupee. Except in Sadar prices are above normal. Water and fodder sufficient.
	Jahanabad ...	0.56	
	Aurangabad ...	4.07	
	Nawada ...	0.28	
28	Shahabad „ 23, '94	0.08	Weather—hot and cloudy during greater part of the week. The rain that has fallen in the south has been beneficial and <i>bhadoi</i> is being sown.
	Buxar ...	1.21	
	Sasaram ...	3.37	
	Bhabua ...	3.29	
29	Saran „ 23, '94	Nil	Weather—greater portion of the week hot with occasional clouds. <i>Bhadoi</i> and paddy sowings in progress. Rain favourable. Prospects hopeful. Water and fodder plentiful. Prices of common rice :— Srs. Chapra ... .. 13 Siwan ... .. 13½ Gopalganj ... .. 13 } per rupee.
	Siwan ...	Nil	
	Gopalganj ...	0.86	
30	Champaran „ 23, '94	0.78	Weather—showery, but light rain. Sowing of <i>aghani</i> and <i>bhadoi</i> in progress. Common rice selling at 14 seers per rupee.
31	Muzaffarpur „ 23, '94	0.08	Weather—hot, and cloudy but without rain. Standing crops doing well. <i>Bhadoi</i> and paddy crops sown are germinating well. More rain wanted for completion of the sowing operations. No disease among cattle. Fodder and water-supply ample. Common rice selling at 12½ seers per rupee.
	Hajipur ...	0.28	
	Sitamarhi ...	0.95	
32	Darbhanga „ 23, '94	0.93	Weather—cloudy and occasionally rainy towards the latter part of the week. Prospects of early paddy and <i>cheena</i> much improved by rainfall of the week. <i>Bhadoi</i> sowings in progress, but more rain is still wanted. Indigo manufacture commenced. Fodder and water for cattle sufficient. Prices remain almost stationary.
	Madhubani ...	2.23	
	Samastipur ...	0.94	
33	Monghyr „ 23, '94	0.51	Weather—very hot and sultry during first part, and cool, cloudy and rainy with high east wind during the latter part of the week. The late rain has done much good. <i>Bhadoi</i> sowing continues, save in some places where the land is still being prepared for the crop. Indigo and sugarcane doing well. Condition of cattle good. Fodder and drinking water sufficient. Prices of common rice :— Srs. Sadar ... .. 13 to 15 Begusarai ... .. 14 Jamui ... .. 15½ } per rupee.
	Begusarai ...	0.89	
	Jamui ...	5.02	
34	Bhagalpur „ 23, '94	1.34	Weather—comparatively cooler for the season. There is no complaint about rain. Sowing of <i>bhadoi</i> busily going on. Common rice 13 seers 14 chitaks per rupee. Fodder sufficient.
	Banka ...	Scanty rain.	
	Madhipura ...	2.10	
	Supul ...	1.54	
35	Purnea „ 23, '94	1.76	Weather—storms and sunshine alternately. <i>Bhadoi</i> and jute doing well. <i>Aghani</i> sowing in progress. More rain needed. Fodder and water sufficient. No cattle-disease. Price of rice continues high—average 16 seers per rupee.
	Kishanganj ...	6.51	
	Araria ...	4.19	

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops																									
BIHAR—concl'd.																												
BHAGALPUR DIVN.—concl'd.	36 Malda June 23, '94	1.58	Weather—cloudy with occasional showers. <i>Boro</i> harvest now over; outturn 12 annas. <i>Bhadoi</i> crops thriving and are being weeded. Winter rice being sown in Barindra tract. Common rice sells at 12 to 18½ seers per rupee. Fodder and water ample.																									
	37 Sonthal Parganas „ 23, '94	3.26	Weather—rainy with occasional cloudy hot days. Ploughing and sowing of <i>bhadoi</i> crops continue. Rice seedlings doing well. Fodder and water sufficient. Price of rice 13 to 16 seers per rupee.																									
	Deoghun ...	3.84																										
	Godda ...	1.04																										
	Jamtara ...	1.63																										
	Pakur ...	1.76																										
Rajmahal ...	2.07																											
ORISSA.																												
ORISSA DIVN.	38 Cuttack „ 23, '94	4.13	Weather—warm and cloudy with occasional showers. Paddy crops generally above ground, but ploughing not everywhere completed. Prices of common rice:— <table><tr><td></td><td>Srs.</td><td>c.</td><td>Srs.</td><td>c.</td></tr><tr><td>Sadar subdivision</td><td>...</td><td>10</td><td>8 to 12</td><td>8</td></tr><tr><td>Jajpur</td><td>...</td><td>9</td><td>0 to 11</td><td>13</td></tr><tr><td>Kendrapara</td><td>...</td><td>9</td><td>0 to 13</td><td>0</td></tr><tr><td>Banki</td><td>...</td><td>14</td><td>0</td><td></td></tr></table> per rupee.		Srs.	c.	Srs.	c.	Sadar subdivision	...	10	8 to 12	8	Jajpur	...	9	0 to 11	13	Kendrapara	...	9	0 to 13	0	Banki	...	14	0	
		Srs.	c.	Srs.	c.																							
	Sadar subdivision	...	10	8 to 12	8																							
	Jajpur	...	9	0 to 11	13																							
	Kendrapara	...	9	0 to 13	0																							
Banki	...	14	0																									
39 Balasore „ 23, '94	5.45	Weather—seasonable, cloudy with heavy showers. <i>Beali</i> rice 12 annas sown in the south of the district. All crops are late. Sowing and ploughing still in progress. Prospects good so far, as sufficient rain is reported everywhere. Prices of rice:— <table><tr><td></td><td>Srs.</td></tr><tr><td>Bhadrak</td><td>...</td></tr><tr><td>Balasore</td><td>...</td></tr></table> 14 } per rupee. Price of common rice in the south of the district shows no tendency to rise.		Srs.	Bhadrak	...	Balasore	...																				
	Srs.																											
Bhadrak	...																											
Balasore	...																											
40 Puri „ 21, '94	1.25	Weather—cloudy with occasional showers of rain. Lands for the ensuing rice crop are being ploughed and in places being sown. <i>Dalua</i> is being harvested. Miscellaneous crops doing well. Common rice sells at from 12 to 16 seers per rupee.																										
Khurda ...	1.86																											
CHOTA NAGPUR.																												
South-West Frontier Agency.																												
CHOTA NAGPUR DIVN.	41 Hazaribagh June 23, '94	6.18	Weather—seasonable. Ample rain all over the district. Prospects of sugarcane good. Ploughing and sowing in vigorous progress all over the district. Fodder and water sufficient. Common rice selling at 12 to 14 seers per rupee.																									
	Giridi ...	2.92																										
	42 Lohardaga „ 23, '94	0.46	Weather—cloudy. Sowing of both upland and lowland paddy continues. Common rice selling at 14 seers per rupee. Fodder and water sufficient.																									
	43 Palamau ...	...	Report not received.																									
	44 Manbhum „ 23, '94	1.45	Weather—rainy and cloudy. Ploughing actively going on. Paddy seedlings doing well. Sugarcane thriving. Price of common rice 10 to 14 seers per rupee.																									
Gobindpur ...	0.49																											
45 Singhbhum „ 23, '94	0.66	Weather—showery. <i>Gora dhan</i> being sown.																										

Published for general information.

CALCUTTA; REVENUE DEPT.,  
The 26th June 1894.C. E. BUCKLAND,  
Secy. to the Govt. of Bengal.



## Results of the Meteorological Observations taken at the Alipore Observatory from 17th to 23rd June 1894.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fah.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
1894.		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
June	17th	130.0	0.8	29.588	82.7	85.6	7.2	78.4	80.1	0.996	79.1	89	SSW and WSW ...	60	Nil	Chiefly cloudy, o, d.
"	18th	149.8	5.8	540	83.5	91.9	13.7	78.2	80.3	.993	79.0	87	WSW and WNW	82	0.40	Partially cloudy, o, g, d, t, p, <, d.
"	19th	144.5	5.9	497	84.3	90.8	13.2	77.6	81.0	1.019	79.8	87	WNW, calm and variable.	34	0.39	Partially cloudy, o, g, p.
"	20th	135.0	0.6	462	84.5	89.3	8.9	80.4	81.5	1.637	80.3	85	WSW, ESE and calm.	83	0.63	Chiefly cloudy, o, p.
"	21st	146.0	2.2	442	83.2	87.1	7.1	80.0	80.3	0.998	79.2	88	E and SE by S ...	142	0.48	Chiefly cloudy, o, g, p.
"	22nd	138.7	0.1	446	81.2	84.6	6.2	78.4	79.5	.984	78.7	92	SE by E and SSE	149	0.76	Cloudy, o, g, d, p, t.
"	23rd	146.5	1.1	484	82.3	84.8	5.8	79.0	79.8	.985	78.8	89	SSE and SSW ...	105	0.65	Chiefly cloudy, o, d, p, t, lr.

The mean pressure of the seven days ... .. Inches. 29.404

The average pressure of the corresponding period for 24 years, Surveyor-General's Office ... .. 29.524

The total number of hours of bright sunshine ... .. Hours. 16.5

The maximum possible number of hours of sunshine ... .. 94.4

The mean temperature of the seven days ... .. 83.1

The average temperature of the corresponding period for 24 years, Surveyor-General's Office ... .. 84.2

The extreme variation of temperature ... .. 14.3

The maximum temperature ... .. 91.9

The highest velocity of the wind in one hour ... .. Miles. 14

The mean relative humidity ... .. % 88

The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office ... .. 84

The total fall of rain from 17th to 23rd June 1894 ... .. Inches. 3.31

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 3.39

The total fall from 1st January to 23rd June 1894 ... .. 15.55

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 18.71

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h., 10h., 16h. and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder; <, lightning; d, dew; lr, lightning reflection.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 25th June 1894.

J. H. GILLILAND.

For Meteorological Reporter to the Govt. of India.



## Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.	STATION OBSERVATIONS.																
	DIVISION.	DISTRICT.	Representative station.	AIR PRESSURE.			WIND.		TEMPERATURE.								
				Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.		
SOUTH-WEST BENGAL.	Burdwan	Burdwan	...	29.449	29.494	-.047	E	67	94.2	20th June	79.2	17, 22, 23rd June	91.6	80.0	85.8		
		Raniganj	...	29.218	29.500	-.023	E	75	95.2	19th "	77.8	19th "	92.0	79.2	85.6		
		Birbhum	...														
		Bankura	...	Bankura	...	29.225	29.471	-.036	Calm	107	94.1	19, 20 "	78.5	19, 22, 23rd June	91.0	79.1	85.0
		Midnapore	...	Midnapore	...	29.404	29.498	-.036	NE	96	93.3	20th "	78.1	19th "	90.3	79.4	84.8
	Presidency	Hooghly	...														
		Howrah	...														
		24-Parganas	...	Saugor Island	...	29.513	29.481	-.066	Variable	329	90.2	19th "	71.0	22nd "	88.3	80.8	84.6
		Calcutta	...	Calcutta	...	29.522	29.487	-.059	Variable	93	92.1	19th "	77.7	19th "	88.0	78.8	83.4
		Nadia	...	Krishnagar	...	29.510	29.505	-.037	SE	137	94.3	19th "	78.2	17th "	90.7	79.4	85.1
NORTH BENGAL.	Rajshahi	Murshidabad	...	Berhampore	...	29.500	29.515	-.035	E	98	94.2	21st "	77.8	17th "	90.6	79.8	85.2
		Jessore	...	Jessore	...	29.529	29.509	-.061	SEly	102	93.0	19th "	76.4	23rd "	89.6	79.8	84.7
		Khulna	...														
		Rajshahi	...	Rampur Boalia	...	29.493	29.512	-.026	Calm & SE	106	93.1	21st "	78.1	17th "	90.1	79.8	85.0
		Dinaipur	...	Dinaipur	...	29.471	29.546	-.004	E	39	95.1	19th "	77.2	23rd "	91.5	79.2	85.4
	Dacca	Jalpaiguri	...	Jalpaiguri	...	29.343	29.582	+.045	NEly	83	92.9	21st "	76.1	18, 23 "	90.0	77.0	83.7
		Darjeeling	...	Darjeeling	...	22.869	—	-.012	NE	78	70.6	21st "	56.7	17, 23 "	67.2	58.1	62.7
		Gnatong	...	—	—	—	—	Variable	99	58.4	17, 21 "	41.6	17th "	57.5	44.9	51.2	
		Kuch Bihar	...														
		Rangpur	...	Rangpur	...	29.481	29.556	-.021	SE	70	92.8	20th "	76.2	22, 23 "	90.5	78.7	84.6
EAST BENGAL.	Dacca	Bogra	...	Bogra	...	29.528	29.541	+.006	ESE	81	94.2	20th "	76.7	22nd "	90.9	79.5	85.2
		Pabna	...	Sirajganj	...	29.537	29.536	-.024	SE	79	93.3	20th "	76.7	22, 23 "	89.4	78.9	84.1
		Dacca	...	Narayanganj	...	29.564	29.535	-.051	SE	241	91.7	20th "	78.2	21, 23 "	87.8	79.7	83.7
		Mymensingh	...	Mymensingh	...	29.549	29.559	-.028	ESE	115	90.7	17, 20 "	77.5	22nd "	88.3	78.7	83.5
		Faridpur	...	Faridpur	...	29.552	29.546	-.036	SE	77	90.5	19, 20 "	77.4	22nd "	87.9	79.0	83.4
	Chittagong	Backergunge	...	Barisal	...	29.563	29.521	-.049	Calm	88	91.3	20th "	76.9	23rd "	88.0	79.3	83.7
		Tippera	...	Comilla	...	29.573	29.557	-.040	SE	186	92.3	20th "	77.2	22, 23 "	89.7	78.2	84.0
		Noakhali	...	Noakhali	...	29.562	29.552	-.057	ESE	210	89.0	20th "	76.3	23rd "	86.6	78.3	82.4
		Chittagong	...	Chittagong	...	29.548	29.582	-.003	SSE	200	89.7	17th "	76.1	23rd "	87.5	77.7	82.6
		South Lushaj Hills	...														
BIHAR.	Patna	Patna	...	Bankipore	...	29.366	29.495	-.021	ENE	172	99.5	19th "	78.7	23rd "	95.6	81.5	88.6
		Gaya	...	Gaya	...	29.154	29.477	-.038	E	157	99.5	18th "	77.8	20, 23 "	95.2	79.3	87.1
		Shahabad	...	Dehri	...	29.198	29.500	-.003	Variable	303	97.3	18th "	76.0	19th "	92.3	79.4	85.8
		Buxar	...	Buxar	...	29.308	29.500	-.008	NE	187	98.0	18th "	75.8	19th "	94.3	79.2	86.7
		Arrah	...	Arrah	...	29.351	29.489	-.006	Variable	87	99.4	18th "	79.5	23rd "	96.4	82.0	89.2
	Bhagalpur	Saran	...	Chapra	...	29.371	29.503	+.001	Ely	162	97.8	19th "	78.6	23rd "	95.1	81.3	88.2
		Champaran	...	Motihari	...	29.342	29.520	-.003	ENE	181	93.0	21, 22 "	77.9	20, 23 "	91.6	79.1	85.4
		Muzaffarpur	...	Muzaffarpur	...	29.385	29.514	—	ESE	158	94.2	21st "	78.2	23rd "	92.8	80.3	86.5
		Darbhanga	...	Darbhanga	...	29.396	29.513	-.025	ESE	170	95.0	21st "	78.2	21, 22, 23rd June	90.8	79.8	85.3
		Monghyr	...														
ORISSA.	Orissa	Bhagalpur	...	Bhagalpur	...	29.389	29.561	-.012	SE	162	94.2	19th "	78.0	17, 23 "	92.1	79.4	85.7
		Purnea	...	Purnea	...	29.457	29.535	-.010	NEly	142	95.8	21st "	76.7	19th "	91.6	79.1	85.4
		Malda	...	Malda	...	29.491	29.514	+.008	SE	71	95.1	20th "	78.5	23rd "	92.2	80.2	86.2
		Sonthal Parganas	...	Naya Dumka	...	29.036	29.496	-.011	ESE	176	93.6	21st "	77.2	23rd "	90.9	78.9	84.9
		Cuttack	...	Cuttack	...	29.458	29.480	-.073	SW	76	95.2	20th "	77.3	20th "	90.3	79.1	84.7
	Chota Nagpur	False Point	...	False Point	...	29.527	29.489	-.067	SWly	251	95.5	20th "	78.6	20th "	88.4	79.5	84.0
		Balasore	...	Balasore	...	29.471	29.473	-.053	SW	123	92.9	19th "	76.7	20th "	89.7	78.6	84.2
		Puri	...	Puri	...	29.528	29.483	—	SW	312	92.7	22nd "	78.1	21st "	88.6	80.0	84.3
		Gopalpur	...	Gopalpur	...	29.538	29.499	—	SWly	394	90.2	19, 20 "	75.6	21st "	86.9	79.3	83.1
		Hazaribagh	...	Hazaribagh	...	27.553	29.480	-.050	SEly	202	89.2	21st "	73.3	19th "	87.1	74.8	81.0
ASSAM.	Chota Nagpur	Lohardaga	...	Ranchi	...	27.444	29.482	-.027	NE	171	88.0	20, 21 "	72.4	17th "	86.1	74.7	80.4
		Palamau	...	Daltonganj	...												
		Manbhum	...														
		Singbhum	...	Chaibassa	...	28.765	29.462	-.037	WSW	54	93.9	19th "	77.7	17, 22 "	91.4	79.2	85.3
		Sibsagar	...	Sibsagar	...	29.314	29.539	-.033	Calm	—	96.2	21st "	76.0	22nd "	89.4	77.7	83.6
ASSAM.	Chota Nagpur	Goalpara	...	Dhubri	...	29.505	29.573	-.009	NEly	150	91.2	19th "	76.6	22, 23 "	88.4	79.4	84.0
		Cachar	...	Silchar	...	29.541	29.595	-.049	Calm	—	93.5	17, 20 "	75.3	17th "	91.5	77.6	84.6

\* Mean of six days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the last ten years. The humidity of the atmosphere is expressed in percentage, saturated air being represented by 100. A clear sky is denoted by 0 and an overcast sky by 10. The mean of the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional stations for the period in question. In the district sending in returns divided by the number of stations. A rainy day is one on which at least a tenth of an inch fell.

for the week ending Saturday, the 23rd of June 1894.

DISTRICT OBSERVATIONS.																DISTRICT.
Variation from normal mean.	Mean, 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	OF WEEK.				RAINFALL.							
					Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Since 1st of month.			Since 16th May 1894.				
									Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.		
-0.7	82.8	86	8.4	1.06	1.69	2.48	2.25	3.03	6.38	6.84	-0.46	6.95	9.34	-2.39	Burdwan.	
-1.2	81.3	92	6.0	1.73	1.61	2.98	3.33	3.51	9.05	7.95	+1.10	9.05	9.82	-0.77		
-2.2	82.5	87	8.3	2.75	2.53	3.16	3.00	3.20	9.04	7.73	+1.31	9.04	9.70	-0.66	Bankura.	
-1.3	83.2	87	5.6	2.06		2.82		2.84		7.15			9.10		Midnapore.	
					1.85	2.42	2.33	3.14	7.46	7.24	+0.22	8.09	9.66	-1.57	Hooghly.	
					4.07	2.84	5.00	3.31	8.82	7.41	+1.41	9.03	9.80	-0.77	Howrah.	
-1.5	83.3	90	9.9	2.53	2.70	2.83	4.50	3.26	8.00	7.75	+0.25	8.87	10.47	-1.60	24 Parganas.	
-1.1	83.0	89	7.3	2.88	2.88	2.90	6.00	3.40	6.68	7.01	-0.33	6.94	8.57	-1.63	Calcutta.	
-0.4	83.3	84	8.3	1.58	1.00	2.47	3.00	3.24		7.92			11.36		Nadia.	
-0.2	81.6	93	9.9	2.04	1.28	2.64	2.50	3.09	4.75	7.02	-2.27	4.87	10.19	-5.32	Murshidabad.	
-0.6	82.9	91	6.6	0.85	2.11	2.91	3.60	3.55	7.90	9.59	-1.99	10.01	12.83	-2.82	Jessore.	
					2.45	3.93	4.00	4.33	8.19	10.51	-2.32	9.27	13.48	-4.21	Khulna.	
+0.9	83.8	90	7.0	1.06	0.51	2.86	1.67	3.19	3.28	8.17	-4.89	4.30	11.61	-7.31	Rajshahi.	
+2.0	82.1	90	8.4	0.76	1.02	3.94	3.00	3.56	4.95	10.48	-5.53	5.38	11.58	-9.20	Dinajpur.	
+2.2	81.1	89	7.6	6.68	0.70	8.10	5.00	5.14	12.30	22.77	-10.47	14.15	30.41	-16.26	Jalpaiguri.	
+1.9	61.6	94	9.7	3.67	3.21	8.70	5.25	3.61	14.20	21.22	-6.92	22.20	27.73	-5.53	Darjeeling.	
-	50.8	-	7.9	3.91												
					2.94	8.38	4.00	5.19	11.52	23.84	-12.32	18.82	32.40	-13.58	Kuch Bihar.	
+2.2	83.0	87	8.0	2.40	1.54	5.57	2.75	4.31		16.56			23.79		Rangpur.	
+1.8	82.6	89	6.6	0.55	0.54	3.05	2.25	3.08	5.90	10.06	-4.16	13.42	14.62	-1.20	Bogra.	
+1.1	82.1	89	10.0	0.52	1.29	2.80	3.50	3.63	5.63	9.10	-3.47	14.07	12.85	+1.22	Pabna.	
+0.3	81.8	93	9.7	2.65	2.24	3.01	4.25	3.93	6.41	10.20	-3.79	14.11	14.09	+0.02	Dacca.	
+1.2	81.2	91	9.0	1.27	1.42	3.51	4.00	4.12	12.89	13.84	-0.95	20.73	18.66	+2.07	Mymensingh.	
+0.2	82.4	90	7.4	2.56	2.13	2.93	3.00	3.82	8.76	9.87	-1.11	11.57	14.06	-2.49	Faridpur.	
+0.4	82.4	90	9.9	3.13	3.03	5.05	4.00	4.58	10.87	14.70	-3.83	13.85	18.65	-4.80	Backergunge.	
+1.6	81.6	94	7.4	1.01		3.79		4.32		13.31			17.43		Tippera.	
+0.7	81.5	90	5.6	3.75	2.11	7.19	3.50	4.62	12.82	21.92	-9.10	20.17	26.80	-6.63	Noakhali.	
+1.5	81.3	88	8.6	1.11	3.27	7.76	4.00	4.62	15.06	22.90	-7.85	25.87	28.08	+0.79	Chittagong.	
					2.74	4.78	4.00	5.50	15.45	15.34	+0.11	27.34	19.72	+7.62	South Lushai Hills.	
+0.9	85.5	76	9.4	0.26	0.90	2.15	2.00	2.03	2.11	4.14	-2.03	2.15	5.49	-3.34	Patna.	
-1.5	82.9	87	7.7	4.34	2.14	1.33	2.50	1.84	3.30	3.53	-0.23	3.30	4.89	-1.59	Gaya.	
-4.4	83.8	86	7.4	3.61												
-1.0	83.3	84	6.9	2.40		1.41		1.90		2.94			3.75		Shahabad.	
+0.9	85.2	80	6.7	0.08												
+0.8	85.0	80	9.1	-	0.11	1.76	0.33	2.17		3.92			5.03		Saran.	
-0.6	84.3	82	5.4	0.78	0.73	2.41	1.50	2.34		5.44			6.79		Champaran.	
-	83.3	87	8.0	0.08		2.83		2.34		5.63			6.93		Muzaffarpur.	
-0.3	82.8	86	8.0	0.93	1.32	2.59	2.33	2.55	3.13	5.65	-2.55	3.13	6.92	-3.79	Darbhanga.	
					1.48	2.13	1.33	2.37	4.10	4.39	-0.29	4.10	5.77	-1.67	Monghyr.	
+0.8	84.1	85	8.3	1.34	1.34	2.76	2.25	2.86	4.00	6.03	-2.03	4.00	7.76	-3.76	Bhagalpur.	
+1.3	82.0	89	3.9	1.76	3.17	4.31	3.33	3.39	9.19	9.98	-0.79	9.21	13.39	-4.18	Purnea.	
+0.5	83.3	90	9.0	1.58	1.49	4.18	3.50	3.84	5.44	8.93	-3.54	5.54	11.67	-6.13	Malda.	
-1.3	82.8	86	4.7	3.26	2.13	2.78	3.17	3.12	6.56	6.43	+0.13	6.94	8.75	-1.81	Sonthal Parganas.	
-2.5	83.7	79	7.9	3.63		2.54		2.75		5.65			7.74		Cuttack.	
-1.4	83.4	85	8.9	0.55												
-1.1	81.9	94	5.9	5.25		2.27		2.78		5.58			8.68		Balasore.	
-	81.8	90	7.9	2.23		2.24		2.42		5.29			6.72		Puri.	
-	81.7	84	4.0	1.30												
-2.4	77.5	89	10.0	5.32		2.49		2.73		5.61			7.10		Hazaribagh.	
-1.6	77.8	89	7.6	0.74	1.49	2.91	3.00	3.49	6.65	5.65	+1.00		7.49		Lohardaga.	
						1.51		2.25		3.69			4.69		Palamau.	
					2.50	2.58	2.50	3.23	11.02	5.85	+5.17	11.10	7.34	+3.76	Manbhum.	
-1.6	82.2	87	9.6	0.66	0.66	2.71	1.00	3.00	7.13	5.94	+1.19	7.13	8.37	-1.24	Singbhum.	
0	80.9	92	8.3	6.29											Sibsagar.	
+3.3	81.4	90	9.3	1.66											Goalpara.	
+2.5	80.5	91	9.6	9.27											Cachar.	

last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. numbers denoting cloud amount represents the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal during the past ten years. The means of the district are the numerical average of the rainfall returned received in the district, i.e., from total rainfall at the subdivisional



## Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 23rd of June 1894.

Meteorological divi- sion.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1894.	Average rainfall from 16th May to date.
				Sunday, 17th.	Monday, 18th.	Tuesday, 19th.	Wednesday, 20th.	Thursday, 21st.	Friday, 22nd.	Saturday, 23rd.							
SOUTH-WEST BENGAL.	Burdwan.	Burdwan ... Kalna ...	0'30	...	3'22	...	...	0'08	0'06	...	2	3'32	1'55	9'05	6'60	10'05	8'80
		Burdwan ... Burdwan ...	0'48	...	0'03	...	...	...	0'41	2	1'06	1'50	5'75	5'82	6'27	8'51	
		Burdwan ... Katwa ...	0'02	...	...	0'03	...	...	0'38	1	0'43	2'76	5'13	8'13	5'88	10'38	
		Burdwan ... Raniganj ...	...	0'33	0'30	...	0'01	0'05	0'22	4	1'73	3'12	5'56	6'37	5'56	8'27	
		Burdwan ... Mankur ...	...	...	...	...	...	0'34	0'10	2	0'53	?	5'44	?	5'44	?	
		Birbhum ... Sori ...	0'07	...	1'30	0'40	...	0'09	0'31	3	2'77	3'03	10'28	7'33	10'28	9'52	
		Birbhum ... Hetampur ...	...	...	0'27	0'38	...	0'32	0'16	4	1'13	3'24	9'32	9'40	9'32	10'40	
		Birbhum ... Rampur Hat ...	0'13	...	0'01	...	...	...	0'50	3	0'94	2'67	7'55	7'54	7'55	9'61	
		Birbhum ... Bolpur ...	...	...	...	...	...	0'34	0'09	1	0'43	?	6'90	?	6'90	?	
		Birbhum ... Murari ...	0'08	...	1'00	...	...	...	1'20	3	3'78	?	5'69	?	5'69	?	
		Birbhum ... Labpur ...	0'10	...	...	0'31	...	0'04	0'87	3	1'32	?	7'10	?	7'10	?	
		Bankura ... Bankura ...	0'03	...	0'14	0'42	0'05	0'35	1'76	4	2'75	2'20	6'71	6'69	6'71	8'70	
		Bankura ... Vishupur ...	...	...	...	...	...	0'51	1'52	2	2'03	3'03	12'49	7'80	12'49	10'07	
		Bankura ... Malaura ...	...	...	1'10	1'70	...	...	0'49	3	3'29	3'79	7'19	8'11	7'19	9'89	
		Bankura ... Khatra ...	...	...	0'16	...	...	0'45	1'42	3	2'03	3'02	8'28	8'28	10'00	?	
		Bankura ... Indas ...	0'32	...	...	...	...	0'26	0'26	...	...	...	?	?	?	?	
		Bankura ... Kotalpur ...	...	...	...	0'12	...	...	2'78	2	2'90	?	9'82	?	9'82	?	
		Bankura ... Onda ...	...	0'02	0'60	...	0'38	0'84	...	4	2'74	?	6'56	?	6'56	?	
		Bankura ... Gangajalghati ...	...	...	3'33	0'27	...	0'20	0'83	4	4'83	?	11'00	?	11'00	?	
		Bankura ... Raipur ...	...	...	0'17	...	...	0'76	0'36	3	1'29	?	8'37	?	8'37	?	
		Bankura ... Sonamukhi ...	...	...	...	...	...	...	0'92	1	0'92	?	4'76	?	4'76	?	
		Midnapore ... Contai ...	...	...	...	0'22	0'20	1'03	2'85	4	5'20	2'63	16'53	6'83	16'53	8'83	
		Midnapore ... Tamruk ...	...	...	...	0'80	0'33	0'43	1'20	4	2'76	3'30	9'77	6'90	9'77	9'13	
		Midnapore ... Midnapore ...	0'04	...	0'64	...	0'81	0'05	0'15	3	1'79	2'47	10'58	6'62	10'58	8'57	
	Midnapore ... Ghatal ...	0'67	...	0'29	...	0'10	0'15	0'78	5	1'99	2'86	9'02	8'22	10'38	9'86		
	Midnapore ... Kukrahati ...	0'22	...	...	0'38	0'23	0'18	0'53	5	1'54	?	7'54	?	8'01	?		
	Midnapore ... Garbheta ...	0'23	...	...	...	0'22	0'30	...	3	0'75	?	13'32	?	13'35	?		
	Midnapore ... Panskura ...	0'15	...	1'63	0'03	0'35	0'34	0'13	5	2'63	?	9'92	?	10'07	?		
	Midnapore ... Dantoon ...	...	...	0'07	0'04	0'30	0'23	...	2	0'04	?	6'42	?	6'42	?		
	Hooghly ... Serampore ...	...	...	...	0'08	0'04	0'06	0'49	2	1'55	2'31	6'00	7'58	7'57	9'77		
	Hooghly ... Hooghly ...	...	...	...	...	...	0'14	0'82	2	0'86	2'32	6'43	6'91	6'84	9'63		
	Hooghly ... Jahanabad ...	0'15	...	...	0'60	...	...	2'19	3	3'03	2'64	9'74	7'23	9'74	9'68		
	Howrah ... Howrah ...	0'20	...	...	1'25	0'17	0'26	0'75	5	2'63	2'69	5'47	7'58	5'82	9'60		
	Howrah ... Moheureka ...	...	...	2'41	0'25	1'30	0'26	1'23	5	4'50	2'98	12'14	7'20	12'21	9'60		
	Howrah ... Ulubaria ...	0'43	...	0'02	0'84	0'10	0'54	0'60	6	3'03	?	10'88	?	11'05	?		
	24 Parganas ... Saugor Island ...	0'17	0'10	...	0'14	0'30	0'31	1'51	6	2'53	2'80	9'54	7'11	9'54	9'53		
	24 Parganas ... Diamond Harbour ...	...	...	0'46	0'35	0'10	0'38	0'21	5	1'50	3'40	8'28	7'31	8'63	9'34		
	24 Parganas ... Canning Town ...	0'50	0'05	...	...	...	0'45	0'02	3	1'62	?	9'40	?	9'40	?		
	24 Parganas ... Alipore (Obs.) ...	0'22	...	0'40	0'39	0'73	0'45	0'09	6	2'88	2'90	6'68	7'82	7'94	10'38		
	24 Parganas ... Barrackpore ...	...	0'26	...	...	...	0'53	0'09	3	1'78	2'47	6'30	8'13	7'42	10'51		
	24 Parganas ... Dum-Dum ...	0'54	...	...	1'13	0'02	0'02	0'50	5	3'80	2'89	7'23	7'92	9'57	10'80		
	24 Parganas ... Barasat ...	0'08	...	...	...	0'35	0'50	0'63	3	1'56	2'75	5'82	7'54	6'92	10'38		
	24 Parganas ... Basirhat ...	...	0'40	0'24	...	0'60	0'59	3'08	5	5'00	2'56	10'75	8'48	11'20	12'23		
	Nadia ... Ranaghat ...	...	...	...	...	...	...	0'15	1	0'15	2'51	6'77	7'80	7'42	10'73		
	Nadia ... Krishnagar ...	0'48	1'12	...	0'42	...	0'19	0'37	5	1'58	2'05	8'80	6'90	9'44	9'42		
	Nadia ... Chuadanga ...	0'20	...	...	0'02	...	0'07	0'40	2	0'69	2'36	7'85	?	12'33	?		
	Nadia ... Meherpur ...	...	...	...	...	...	0'05	0'25	1	0'30	2'76	7'08	8'10	8'87	11'37		
	Nadia ... Kuchitla ...	0'37	0'63	...	0'55	0'25	0'17	0'75	6	2'72	2'65	9'35	8'84	14'92	12'97		
	Murshidabad ... Kandi ...	0'09	...	0'68	...	...	...	0'11	2	0'88	2'70	4'32	7'51	4'32	10'09		
	Murshidabad ... Berhampore ...	0'52	0'10	0'01	...	...	0'07	1'34	3	2'04	2'38	5'69	7'34	5'69	10'56		
	Murshidabad ... Lalbag ...	...	...	...	...	...	0'80	...	1	0'90	1'87	4'75	6'16	4'75	9'63		
	Murshidabad ... Azimganj ...	0'55	...	...	...	...	0'15	0'65	3	1'35	3'06	4'90	7'11	4'90	10'41		
	Murshidabad ... Jangipur ...	0'16	...	0'87	...	...	0'10	0'40	4	1'62	3'22	4'21	6'55	4'98	9'55		
	Murshidabad ... Lakola ...	...	...	...	...	...	0'10	0'80	2	0'90	2'62	4'60	7'46	4'60	10'88		
	Murshidabad ... Akhriaganj ...	0'79	0'05	0'73	...	0'07	0'14	0'86	4	2'64	?	6'26	?	6'86	?		
	Murshidabad ... Patkabari ...	...	...	...	...	...	0'50	...	1	0'50	?	4'00	?	4'60	?		
	Jessore ... Narail ...	0'09	0'18	...	...	0'02	0'55	0'78	3	1'62	2'07	8'68	9'24	10'56	12'07		
	Jessore ... Jessore ...	...	...	...	0'15	...	0'17	0'45	3	0'77	3'13	6'87	10'54	14'01	14'01		
	Jessore ... Jhenidah ...	0'31	0'02	0'25	...	...	0'33	0'39	4	1'35	3'11	5'94	10'72	7'30	14'19		
	Jessore ... Magura ...	0'75	...	2'46	...	...	0'37	0'45	4	4'05	2'60	8'59	9'28	9'60	13'24		
	Jessore ... Bangaon ...	0'13	...	...	...	0'15	0'55	1'05	4	2'78	2'73	7'93	8'21	8'61	10'60		
	Khulna ... Satkhira ...	1'01	...	...	...	0'70	1'02	0'44	4	3'17	4'05	7'06	9'96	9'36	13'00		
	Khulna ... Bagerhat ...	...	...	...	0'20	...	0'03	1'44	3	2'32	3'83	9'27	11'07	9'99	14'28		
	Khulna ... Khulna ...	0'67	0'10	...	...	0'13	0'35	0'00	5	1'85	3'00	7'63	10'50	8'45	13'15		
	Khulna ... Nakipur ...	0'63	...	...	...	...	0'33	...	2	0'06	?	?	?	?	?		
	Khulna ... Ramnol ...	...	...	...	...	...	0'13	0'78	2	0'91	?	?	?	?	?		
	Rajshahi ... Bonfai ...	...	...	0'08	...	...	0'45	0'25	1	0'88	2'33	3'03	7'47	3'07	10'53		
	Rajshahi ... Nator ...	0'10	0'04	...	0'09	...	0'03	0'46	2	0'72	2'53	3'55	7'88	5'74	11'36		
	Rajshahi ... Naugaon ...	...	...	...	...	...	0'15	0'28	2	0'43	3'72	2'99	9'15	4'13	12'94		
	Rajshahi ... Lalpur ...	...	...	...	...	...	0'12	1'80	2	1'51	?	4'32	?	7'64	?		
	Rajshahi ... Manda ...	...	...	...	...	...	0'11	0'16	2	0'27	?	3'95	?	?	?		
	Dinajpur ... Mahadebpur ...	...	...	0'76	...	...	0'53	0'09	2	0'99	3'48	4'25	10'61	4'60	14'25		
	Dinajpur ... Churanwan ...	...	...	0'75	...	0'47	0'22	0'13	4	1'37	3'25	4'20	8'71	4'20	11'88		
	Dinajpur ... Raiganj ...	...	...	...	0'70	...	0'23	0'24	3	1'17	4'58	5'97	12'05	5'97	17'35		
	Dinajpur ... Dinajpur ...	0'13	0'02	...	0'17	0'12	0'14	0'58	4	0'58	2'98	5'86	8'71	7'02	14'03		
	Dinajpur ... Balughat ...	...	...	0'24	...	...	0'57	...	2	0'81	2'98	5'86	8'71	7'02	14'03		
	Dinajpur ... Thakurgaon ...	...	...	1'75	...	...	0'10	0'32	8	1'36	?	11'35	?	11'35	?		
	Jalpaiguri ... Jalpaiguri ...	...	...	0'00	...	1'03	0'40	0'42	5	0'70	6'07	12'50	21'04	14'16	20'28		
Jalpaiguri ... Alipore Doar ...	...	0'12	0'55	...	1'31	0'45	...										



## Statement of rainfall in Bengal for the week ending Saturday (8 a.m.), the 23rd of June 1894—contd.

Meteorological divi- sion.	Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain- fall since 16th May 1894.	Average rainfall from 16th May to date.	
				Sunday, 17th.	Monday, 18th.	Tuesday, 19th.	Wednesday, 20th.	Thursday, 21st.	Friday, 22nd.	Saturday, 23d.								
EAST BENGAL.	Dacca.	Dacca ...	Munshiganj ...	...	0'18	0'11	...	0'11	0'25	1'38	5	2'73	3'56	8'48	12'57	17'46	16'79	
		Dacca ...	Dacca ...	...	0'04	...	0'08	0'21	0'33	1'04	3	1'70	3'33	6'29	10'65	10'69	14'57	
		Dacca ...	Narayananganj ...	...	0'19	0'22	0'04	0'07	0'66	1'56	4	2'74	2'83	6'48	9'59	12'84	13'23	
		Dacca ...	Manikganj ...	0'36	0'57	0'15	0'06	0'06	0'27	0'32	5	1'79	2'33	4'37	7'97	8'22	11'77	
		Dacca ...	Jaydebpur ...	...	1'02	0'14	0'16	0'11	0'45	1'75	6	3'63	?	8'59	?	13'22	?	
		Mymensingh	Kishorganj ...	...	0'28	0'09	...	0'22	...	0'51	3	1'10	3'98	10'10	16'15	18'01	20'86	
		Mymensingh	Atia (Tangail) ...	...	...	...	0'20	0'33	0'13	0'27	4	0'93	2'57	7'68	10'18	13'39	13'49	
		Mymensingh	Mymensingh ...	...	0'02	0'33	0'47	0'15	0'15	0'15	5	1'27	3'98	12'82	16'21	18'92	21'11	
		Mymensingh	Jamulpur ...	...	...	0'65	...	...	0'21	...	2	0'86	3'27	14'12	11'64	16'40	16'77	
		Mymensingh	Netrakona ...	...	0'45	0'44	0'53	0'42	0'71	0'40	6	0'95	3'75	19'78	16'06	36'92	18'08	
		Mymensingh	Subarnakhal ...	...	...	0'41	...	...	...	0'11	...	2	0'52	?	8'49	?	12'95	?
		Mymensingh	Durgapur ...	...	1'00	0'69	...	0'40	1'00	0'40	5	3'40	?	13'70	?	24'55	?	
		Mymensingh	Sherpur Town ...	...	0'40	0'14	...	...	0'33	0'12	4	0'99	?	12'34	?	16'80	?	
		Mymensingh	Diwanganj ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?
		Faridpur ...	Madaripur ...	0'20	0'61	...	...	0'25	...	1'38	4	2'44	3'29	11'07	10'41	12'37	14'35	
		Faridpur ...	Faridpur ...	0'06	...	0'73	...	0'06	0'75	0'06	3	2'56	2'59	6'43	9'81	10'35	14'79	
		Faridpur ...	Goalundo ...	0'65	...	...	...	...	0'70	0'05	2	1'40	2'62	8'79	9'42	11'79	13'05	
		Backergunge	Patuakhali ...	0'20	0'05	...	...	0'20	1'50	1'70	4	3'65	5'38	9'35	17'44	11'23	22'03	
		Backergunge	Pirojpur ...	...	...	...	0'46	0'17	0'57	1'19	4	2'59	4'12	10'26	11'83	13'26	15'24	
		Backergunge	Barisal ...	0'64	0'06	0'10	...	0'05	1'08	1'12	4	3'05	4'90	13'03	12'63	18'20	16'64	
		Backergunge	Gournadi ...	...	0'72	...	...	...	...	...	...	...	?	?	?	?	?	?
		Backergunge	Bhola ...	0'09	0'18	...	...	0'19	0'61	1'94	4	3'01	5'79	10'82	16'88	12'68	20'63	
		Backergunge	Daudkhan ...	...	0'33	...	...	0'12	1'18	1'40	4	3'03	?	17'54	?	22'06	?	
		Backergunge	Bauphal ...	...	...	...	...	0'20	0'50	1'30	...	...	?	?	?	?	?	?
	Hill Tippera	Agartala ...	0'30	...	0'50	...	1'60	...	...	...	...	3'57	...	11'94	...	16'14	...	
	Tippera ...	Comilla ...	...	...	...	0'20	0'41	0'50	0'02	3	1'13	4'16	17'87	15'26	20'81	19'81		
	Tippera ...	Chandpur ...	0'08	0'08	0'13	0'04	0'04	2'11	1'26	3	3'74	4'15	11'59	12'96	16'05	16'28		
	Tippera ...	Brahmanbaria ...	0'10	1'35	...	1'08	1'25	...	...	4	3'78	3'30	12'58	13'10	22'44	17'50		
	Tippera ...	Ramchandrapur ...	...	0'60	...	...	...	...	...	1	0'60	?	5'40	?	8'95	?		
	Tippera ...	Nasirnagar ...	0'50	0'75	0'10	1'80	0'80	...	...	...	...	?	?	?	?	?	?	
	Tippera ...	Daudkandi ...	...	0'29	...	0'25	0'13	0'60	0'30	5	1'57	?	4'99	?	10'59	?		
	Tippera ...	Kasba ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	Tippera ...	Laksm ...	...	0'82	...	0'05	1'15	...	...	...	...	?	?	?	?	?	?	
	Noakhali ...	Noakhali ...	0'03	0'07	0'11	...	0'24	1'48	1'82	4	3'75	7'50	13'90	20'27	18'06	25'07		
	Noakhali ...	Penny ...	0'15	...	...	0'06	0'12	0'10	0'03	3	0'46	6'87	11'73	23'54	17'83	23'49		
	Noakhali ...	Harishpur ...	0'05	0'39	0'04	...	...	...	...	...	...	?	?	?	?	?	?	
	Noakhali ...	Ramganj ...	...	...	...	...	0'26	...	...	...	...	?	?	?	?	?	?	
	Chittagong ...	Cox's Bazar ...	0'12	0'56	...	0'07	0'22	2'50	1'51	5	4'98	9'01	14'06	26'01	23'11	31'40		
	Chittagong ...	Chittagong ...	...	0'60	...	...	0'02	0'56	0'37	3	1'55	6'50	16'01	19'78	20'60	30'32		
	Chittagong ...	Kutubdia ...	...	0'35	...	...	...	...	...	...	...	?	?	?	?	?	?	
	Chittagong ...	Satkanya ...	...	...	0'15	...	...	1'10	...	...	...	?	?	?	?	?	?	
	Chittagong ...	Kodala ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	Chittagong ...	Fenoa ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	Chittagong ...	Misra ...	0'11	0'28	...	...	...	0'35	0'17	4	0'91	?	9'65	?	14'30	?		
	Chittagong ...	Chandpur ...	0'42	0'04	...	...	0'61	...	...	...	...	?	?	?	?	?	?	
	South Lushai Hills.	Rangamatia ...	...	...	0'07	0'64	0'25	0'15	1'63	4	2'74	4'78	15'46	15'34	27'35	19'72		
	South Lushai Hills.	Bundarban ...	0'16	0'10	...	0'21	...	...	...	...	...	?	?	?	?	?	?	
	Patna ...	Patna ...	...	...	0'10	...	0'05	0'11	...	2	0'26	2'27	0'51	4'59	0'51	6'09		
	Patna ...	Dinapore ...	...	...	0'04	0'09	0'03	...	...	Nil	0'16	2'11	0'52	4'07	...	5'23		
	Patna ...	Biher ...	...	...	...	1'07	...	0'51	0'05	2	1'63	2'47	2'50	4'41	...	5'82		
	Patna ...	Barh ...	...	...	0'60	...	0'40	0'45	0'10	4	1'55	1'73	3'44	...	...	4'78		
	Patna ...	Bikram ...	0'03	...	...	0'45	0'05	0'11	0'16	3	0'80	?	?	?	?	?	?	
	Patna ...	Hilsa ...	...	...	...	...	0'45	0'37	...	2	0'82	?	?	?	?	?	?	
	Gaya ...	Aurangabad ...	0'08	...	3'25	...	0'04	...	0'12	2	3'49	1'25	5'26	3'50	5'2	4'80		
	Gaya ...	Gaya ...	0'22	...	1'66	0'54	0'03	1'21	0'68	5	4'34	1'47	5'43	4'07	5'43	5'44		
	Gaya ...	Nawadah ...	0'09	...	0'14	...	...	0'41	...	2	0'64	1'50	1'71	3'20	1'71	4'64		
	Gaya ...	Jahanabad ...	...	...	...	0'10	...	...	...	1	0'10	1'31	0'80	3'35	0'80	4'66		
	Gaya ...	Arwal ...	0'02	...	...	...	...	0'63	...	1	0'65	?	2'27	?	2'27	?		
	Gaya ...	Daudnagar ...	...	...	1'62	...	...	0'27	0'04	2	1'93	?	3'98	?	3'98	?		
	Gaya ...	Sherghati ...	...	...	1'12	...	...	0'31	0'08	2	1'51	?	2'41	?	2'41	?		
	Gaya ...	Rajauli ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	Gaya ...	Pakri Barawan.	...	...	0'02	...	...	...	...	...	...	?	?	?	?	?	?	
	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	...	...	1'56	...	2'93	...	3'56		
	Shahabad ...	Dehri ...	0'02	0'03	2'87	0'23	0'08	0'12	0'26	4	3'61	1'60	10'98	2'92	10'98	4'08		
	Shahabad ...	Bhabhua ...	...	...	1'14	0'27	...	0'01	...	2	1'42	1'15	2'52	...	3'13	...		
	Shahabad ...	Sasaram ...	0'60	...	2'09	0'32	0'05	0'73	0'04	4	3'83	1'22	6'56	2'06	6'56	3'33		
	Shahabad ...	Arrah ...	...	...	0'05	0'16	...	...	...	...	...	1'50	...	3'51	...	5'64		
	Shahabad ...	Mohanea ...	...	...	0'82	0'57	...	0'47	0'03	3	1'89	?	4'14	?	4'14	?		
	Shahabad ...	Khiri ...	...	...	...	0'09	...	...	...	1	0'69	?	1'35	?	1'35	?		
	Shahabad ...	Agaoa ...	...	0'63	0'10	...	...	...	...	3	1'53	?	2'76	?	2'76	?		
	Shahabad ...	Ramagar ...	...	0'16	...	...	...	...	...	...	...	?	?	?	?	?	?	
	Shahabad ...	Koath ...	...	...	1'34	...	...	0'43	0'05	2	1'82	?	3'13	?	3'13	?		
	Shahabad ...	Sikroul ...	...	0'08	2'10	...	0'20	...	0'20	3	2'58	?	3'85	?	3'85	?		
	Shahabad ...	Bassowan ...	...	...	0'44	1'06	...	...	...	2	1'50	?	?	?	?	?	?	
	Shahabad ...	Monaharpur ...	...	...	3'02	...	...	...	...	1	3'02	?	?	?	?	?	?	
	Saran ...	Gopalganj ...	...	...	...	0'34	...	...	...	1	0'34	1'35	3'22	3'50	3'52	4'76		
	Saran ...	Siwan ...	...	...	...	...	...	...	...	Nil	Nil	2'19	3'57	4'72	3'57	5'84		
	Saran ...	Ekma ...	...	...	0'14	...	...	...	...	1	0'14	?	?	?	?	?	?	
	Saran ...	Chapra ...	...	...	...	...	...	...	...	Nil	Nil	1'75	5'49	3'56	5'49	4'50		
	Saran ...	Seereepur ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
	Saran ...	Annour ...	...	...	...	2'63	...	...	...	1	2'63	?	3'57	?	3'99	?	?	
	Saran ...	Basantpur ...	...	...	...	...	...	...	...	Nil	Nil	?	2'12	?	2'12	?	?	
	Champaran...	Motihari ...	0'13	0'09	...	0'56	...	...	...	2	0'78	2'45	4'10	5'29	4'83	6'73		
Champaran...	Bettiah ...	...	...	...	0'60	...	0'07	...	1	0'67	2'36	...	5'57	...	6'81			
Champaran...	Bagaha ...	0'24	...	...	3'07	...	0'15	...	...	...	?	?	?	?	?	?		
Champaran...	Burhurree ...	...	...	...	...	...	...	...	Nil	Nil	?	1'91	?	1'91	?	?		
Muzaffarpur	Sitamarhi ...	0'38	0'02	0'22	...	...	0'02	...	2	0'64	2'43	4'12	6'24	4'12	7'60			
Muzaffarpur	Muzaffarpur ...	...	...	...	...	...	0'04	...	...	...	3'13	5'55	5'59	6'92	6'25			
Muzaffarpur	Hajipur ...	...	...	...	...	...	0'33	0'10	2	0'43	2'92	0'73	...	...	...	...		
Muzaffarpur	Paru ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
Muzaffarpur	Mahuwa ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
Muzaffarpur	Shuhar ...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?	?		
Muzaffarpur	Pupri ...	...	...	...	...	...	...	...	...	...	?	?	?	?	?	?		
Darbhanga ...	Tajpur ...	...	...	...	...	0'50	...	0'27	2	0'83	2'88	2'33	5'44	2'33	6'44			
Darbhanga ...	Darbhanga ...	0'14	0'08	...	...	0'18	0'47	0'06</										

## Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 23rd of June 1894—concl'd.

Meteorological division.	Division.	District.	Station.	RAINFALL.								Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain fall since 10th May 1894.	Average rainfall from 16th May to date.
				Sunday, 17th.	Monday, 18th.	Tuesday, 19th.	Wednesday, 20th.	Thursday, 21st.	Friday, 22nd.	Saturday, 23rd.								
BENGAL—concluded.	Bhagalpur—concluded.	Bhagalpur ...	Madhipura ...	0'45	0'05	...	...	1'02	0'05	...	2	1'57	2'83	4'59	6'39	4'39	8'70	
		Bhagalpur ...	Bangaon (Sy-fabad.)	0'28	...	...	...	0'46	...	...	2	0'74	?	1'94	?	1'94	?	
		Bhagalpur ...	Supaul	0'45	...	...	...	0'77	0'30	...	3	1'52	2'79	4'35	6'07	4'35	9'21	
		Bhagalpur ...	Pratapganj...	...	0'54	...	...	...	0'10	...	2	0'64	?	8'12	?	8'12	?	
		Bhagalpur ...	Bhagalpur ...	0'23	...	0'01	...	...	0'05	1'05	2	1'34	2'74	4'00	5'72	4'00	7'31	
		Bhagalpur ...	Banka ...	0'44	...	...	...	...	...	0'47	3	0'93	2'69	?	5'13	?	6'38	
		Bhagalpur ...	Colgong ...	0'47	...	...	...	...	...	...	3	0'03	?	2'63	?	2'63	?	
		Purnea ...	Kishanganj...	0'39	...	1'57	...	3'15	...	0'21	4	5'32	4'05	12'73	11'88	12'73	15'84	
		Purnea ...	Araria ...	...	...	0'05	0'08	2'05	...	0'25	2	2'43	4'40	8'61	9'29	?	12'04	
		Purnea ...	Purnea ...	0'14	...	...	0'05	1'15	0'24	0'18	4	1'76	3'58	6'24	8'75	6'24	11'68	
ORISSA.	Orissa.	Balasore ...	Gondwara (Korah).	...	...	...	...	...	0'06	...	Nil	0'06	?	3'05	?	3'25	?	
		Balasore ...	Barsoe ...	...	0'07	0'39	...	0'56	0'18	0'05	2	1'72	?	?	?	?	?	
		Balasore ...	Forbesganj ...	0'07	0'65	0'08	0'02	...	...	...	2	1'72	?	6'71	?	7'40	?	
		Balasore ...	Kaliaganj ...	...	0'30	1'00	...	0'80	0'10	0'12	5	2'32	?	8'98	?	9'71	?	
		Malda ...	Malda ...	0'12	...	0'01	1'08	0'25	0'07	0'05	3	1'58	3'79	7'25	8'66	7'45	11'11	
		Malda ...	Chanchal ...	0'40	...	0'51	0'14	0'06	0'30	...	4	1'40	4'56	3'62	9'28	3'62	12'30	
		Malda ...	Gajol ...	0'10	...	...	...	0'91	...	...	2	1'01	?	1'43	?	1'95	?	
		Malda ...	Sibganj ...	0'20	...	...	...	0'06	0'03	...	1	0'29	?	2'68	?	2'93	?	
		Sonthal Parganas.	Rajmahal ...	...	...	0'15	1'40	0'34	0'08	0'04	3	2'01	3'47	4'87	7'24	4'96	10'02	
		Sonthal Parganas.	Godda ...	0'61	...	...	0'02	...	0'08	0'47	2	1'18	2'46	2'94	4'82	2'94	7'11	
CHOTA NAGPUR.	Chota Nagpur.	Pakaur ...	Naya Dumka	0'02	...	1'35	0'20	0'09	0'04	0'86	3	2'54	3'13	4'94	7'97	7'13	10'97	
		Deoghur ...	Deoghur ...	0'68	...	0'23	...	...	0'25	1'07	3	3'26	2'81	8'83	6'64	8'83	16'75	
		Jamtara ...	Jamtara ...	0'25	...	0'13	...	...	0'28	0'83	4	2'21	2'34	9'67	5'65	9'67	7'40	
		Bethodda ...	Bethodda ...	...	...	...	...	...	...	...	...	2'45	8'11	6'25	8'11	8'20		
		Nanihat ...	Nanihat ...	...	...	...	...	0'41	0'11	0'58	3	1'10	?	?	?	?	?	
		Assenboni ...	Assenboni ...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
		Katikund ...	Katikund ...	...	...	...	0'60	...	...	...	2	2'70	?	?	?	?	?	
		Modhupur ...	Modhupur ...	...	...	1'01	...	...	0'51	0'41	3	1'93	?	8'18	?	8'18	?	
		Sarwan ...	Sarwan ...	...	0'12	0'15	0'33	0'43	0'75	0'60	3	2'38	?	9'36	?	?	?	
		Sarath ...	Sarath ...	0'12	0'02	1'01	1'08	0'04	0'10	0'37	5	3'34	?	7'07	?	7'18	?	
CHOTA NAGPUR.	Chota Nagpur.	Barkope ...	Barkope ...	0'97	...	...	...	0'01	...	...	2	1'15	?	9'01	?	9'17	?	
		Dunrey ...	Dunrey ...	...	...	1'40	...	...	...	...	...	?	?	?	?	?	?	
		Bhagya ...	Bhagya ...	0'22	...	0'23	0'90	0'36	0'27	0'26	6	2'24	?	?	?	?	?	
		Mohespore ...	Mohespore ...	...	...	...	...	...	0'57	0'47	2	1'31	?	?	?	?	?	
		Barharwa ...	Barharwa ...	0'13	...	0'53	...	0'70	0'37	0'88	5	2'61	?	?	?	?	?	
		Sahibganj ...	Sahibganj ...	0'20	...	0'48	1'28	...	0'29	0'15	5	2'40	?	?	?	?	?	
		Cuttack ...	Jagatsingpur	0'15	0'15	2'08	0'23	1'09	...	...	...	1'71	?	3'93	?	5'24	?	
		Cuttack ...	Banki ...	0'09	...	...	0'23	0'74	1'02	...	...	3'33	?	6'37	?	7'06	?	
		Cuttack ...	Cuttack ...	...	0'11	...	1'46	0'63	1'93	...	4	4'13	3'59	?	7'67	?	10'40	
		Cuttack ...	False Point ...	...	...	...	0'12	0'09	0'17	0'17	3	0'55	1'72	6'81	4'14	6'75	6'45	
CHOTA NAGPUR.	Chota Nagpur.	Kendrapara ...	Kendrapara ...	...	...	...	2'05	0'54	1'22	0'19	4	4'90	1'79	10'85	5'37	10'85	6'40	
		Jajpur ...	Jajpur ...	...	...	0'06	1'40	0'07	1'45	0'16	3	3'14	3'09	7'89	6'21	9'93	8'72	
		Dharmasala ...	Dharmasala ...	...	...	1'50	...	0'30	...	...	...	?	?	?	?	?	?	
		Salipore ...	Salipore ...	...	0'02	1'13	...	0'00	...	...	...	?	?	?	?	?	?	
		Pal Lahara ...	Pal Lahara ...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
		Balasore ...	Akhyapada ...	...	...	...	0'84	0'05	0'06	0'18	3	1'73	?	5'38	?	6'62	?	
		Balasore ...	Chandbali ...	...	...	0'01	0'30	0'10	0'05	0'03	3	0'53	1'88	?	4'82	?	?	
		Balasore ...	Bhadrak ...	...	...	0'37	0'43	0'04	...	0'07	2	1'46	2'34	5'82	4'82	9'42	7'27	
		Balasore ...	Soro ...	...	...	...	...	...	...	...	...	2'27	8'48	4'71	8'72	?	?	
		Balasore ...	Balasore ...	...	...	0'42	2'75	0'04	1'61	0'63	4	5'45	2'51	8'00	5'69	8'47	7'73	
CHOTA NAGPUR.	Chota Nagpur.	Jellapore ...	Jellapore ...	...	0'10	0'05	0'30	0'11	0'02	0'10	4	0'68	2'43	6'81	5'84	6'81	8'33	
		Baripada ...	Baripada ...	...	...	0'51	0'30	1'11	0'52	0'59	5	3'03	2'16	9'40	6'77	9'50	7'64	
		Puri ...	Puri ...	...	...	0'02	0'40	0'17	1'62	0'02	3	2'23	2'26	3'83	4'75	3'83	6'11	
		Puri ...	Khurda ...	...	0'02	0'34	1'37	0'76	1'90	...	...	2'98	5'59	5'14	8'09	7'30	?	
		Puri ...	Bhanpur ...	0'09	...	1'08	...	2'60	0'26	...	...	1'40	?	?	?	?	?	
		Puri ...	Gop ...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
		Puri ...	Satapara ...	...	0'23	...	0'12	3'55	...	...	...	?	?	?	?	?	?	
		Puri ...	Pipli ...	...	...	1'01	0'05	3'55	...	...	...	?	?	?	?	?	?	
		Puri ...	Nayagarh ...	...	...	0'25	0'30	1'34	...	...	...	?	?	?	?	?	?	
		Puri ...	Ranpur ...	1'04	...	0'15	0'36	0'59	0'41	...	...	?	?	?	?	?	?	
CHOTA NAGPUR.	Chota Nagpur.	Kurmala ...	Kurmala ...	...	...	...	...	...	...	...	?	?	?	?	?	?		
		Hazaribagh ...	Pachamba (Giridih).	1'29	...	...	...	0'12	0'05	2'23	3	3'71	2'81	11'05	6'18	11'05	7'68	
		Hazaribagh ...	Hazaribagh ...	0'47	0'29	2'29	0'06	...	0'28	1'93	5	5'32	2'06	8'67	4'91	8'67	6'44	
		Hazaribagh ...	Semtaurah ...	...	...	...	...	...	...	...	...	2'03	5'29	5'08	6'30	?	?	
		Hazaribagh ...	Mahudi Hills	...	...	...	...	...	...	...	...	1'57	?	5'08	?	6'30	?	
		Hazaribagh ...	Jhumra Hill	...	...	...	...	...	...	...	...	3'39	?	6'00	?	6'33	?	
		Hazaribagh ...	Barhi ...	0'16	...	2'04	...	0'04	0'16	2'20	4	4'60	?	7'65	?	8'11	?	
		Hazaribagh ...	Chatra ...	...	...	0'50	...	0'11	0'16	...	4	1'56	?	4'02	?	4'02	?	
		Hazaribagh ...	Karagdeha ...	...	...	...	...	0'75	...	1'20	2	1'95	?	?	?	?	?	
		Hazaribagh ...	Ramgar ...	...	...	...	...	...	0'40	1'10	3	5'90	?	11'80	?	11'80	?	
CHOTA NAGPUR.	Chota Nagpur.	Lohardaga ...	Lohardaga ...	...	...	...	...	1'45	0'09	0'39	2	1'83	3'27	8'11	5'28	8'11	7'01	
		Lohardaga ...	Ranchi ...	...	...	...	0'12	0'19	0'30	0'43	4	1'04	2'54	5'18	5'99	5'22	7'30	
		Lohardaga ...	Silli ...	...	...	2'40	...	1'10	...	1'40	3	4'00	?	9'50	?	?	?	
		Lohardaga ...	Palkot ...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
		Lohardaga ...	Tamar ...	...	...	...	0'20	0'12	0'04	1'76	1	1'76	?	?	?	?	?	
		Lohardaga ...	Chainpur ...	...	...	...	...	1'33	0'04	0'50	3	0'86	?	8'16	?	8'16	?	
		Palamau ...	Palamau ...	...	0'19	0'86	1'88	...	0'22	...	...	1'51	?	3'60	?	4'00	?	
		Palamau ...	(Daltonganj).	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
		Palamau ...	Balunath ...	0'68	0'05	0'14	0'01	...	...	0'58	3	1'46	?	6'44	?	?	?	
		Palamau ...	Husainabad ...	...	...	...	0'60	...	...	0'32	2	0'92	?	3'83	?	3'83	?	
CHOTA NAGPUR.	Chota Nagpur.	Garhwa ...	Garhwa ...	...	...	0'07	0'45	...	...	...	?	?	?	?	?	?		
		Manbhum ...	Purulia ...	...	...	...	0'90	...	...	...	1'55	2	1'45	2'53	10'76	6'12	10'76	7'97
		Manbhum ...	Gobindpur ...	...	0'28	0'15	...	...	0'07	3'05	3	3'55	2'63	11'27	5'57	11'42	6'71	
		Manbhum ...	Raghunathpur.	...	0'04	0'53	0'73	...	0'21	2'04	4	3'55	?	9'29	?	9'29	?	
		Manbhum ...	Barabhum ...	...	...	...	0'50	...	...	0'50	3	1'42	?	?	?	?	?	
		Manbhum ...	Jhalda ...	...	0'15	0'64	0'08	0'30	...	1'05	...	4	2'22	?	9'19	?	9'19	?
		Manbhum ...	Chas ...	0'58	...	1'44	0'94	0'36	...	0'50	5	3'82	?	8'54	?	8'54	?	
		Manbhum ...	Pandra ...	...	...	0'69	0'16	...	0'12	4'22	3	4'69	?	12'83	?	6'12	?	
		Singbhum...	Chaibassa ...	0'03	0'05	...	...	...	0'56	0'02	1	0'66	2'71	7'13	5'94	7'13	8'51	
		Singbhum...	Chakardherpur.	...	0'30	...	...	0'55	0'30	0'50	4	2'25	?	7'40	?	?	?	
CHOTA NAGPUR.	Chota Nagpur.	Singbhum...	Ghatila ...	...	...	...	...	...	...	...	?	?	?	?	?	?		
		Singbhum...	Beharagura	...	0'20	1'02	...	0'48	0'36	...	?	?	?	?	?	?	?	
		Singbhum...	Gasikura ...	...	...	...	...	0'47	0'44	...	2	0'91	?	?	?	?	?	
		Singbhum...	Kalikapur ...	...	0'16	...	0'20	...	0'92	...	?	?	?	?	?	?	?	
		Singbhum...	Monahorpur	...	...	0'04	0'87	...	...	...	4	1'40	?	4'87	?	4'87	?	
		Singbhum...	Kharwan ...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	
		Sing																



**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING 8 A.M., SATUR-  
DAY, THE 23RD OF JUNE 1894.**

At the close of the previous week the south-west monsoon current had spread over the whole of the province, and general rain had commenced on about the 13th and 14th instants. The commencement of the rains was due to a small storm which advanced in a north-westerly and westerly direction across the province, and a moderate advance of the monsoon winds had followed in the rear of the small storm. This inrush of monsoon winds, however, began to fall off from the beginning of the present week. On the 17th, or the first day of the week, pressure rose briskly at all except a few of the north-eastern stations, and became rather largely above the normal, the excess usually ranging from 0.09" to 0.05", and hence the pressure distribution was rather unfavourable for the continued free advance of the current. The rainfall reported on the 17th was decidedly local in character, and where falls occurred they were usually rather light. Pressure began to fall moderately on the 18th, but it was still in excess over the western half of the province, and the monsoon current continued light, and only local rainfall was reported in all districts except parts of North Bengal, where it was general and rather heavy. Pressure again fell slowly on the 19th, and the distribution became a little abnormal, an excess of 0.02" being registered in the west of Bihar and Chota Nagpur, while in East Bengal and Assam defects were registered amounting to 0.07" at Chittagong and 0.09" at Silchar. Hence the differences of pressure over the province were much smaller than usual, and the western stations reported little or no rain, though fairly general rain was being received at the eastern stations. On the 20th pressure had again fallen over the whole province, the fall being largest in Orissa and over the north of the Bay, and smallest in Assam and Central Bengal, and pressure became below the normal by amounts ranging up to 0.13" on the Orissa and South Bengal coasts. A distinct cyclonic circulation of winds also set up at the stations round the north of the Bay, and hence it was clear that a barometric depression had formed over this area. On the 20th, as usually happens in such cases, rainfall was again not very general. On the 21st pressure had fallen slowly in Orissa, South Bengal, Chota Nagpur and the west of Bihar, while it had risen elsewhere, the increase being very rapid in Burma, and winds were still cyclonic in direction in the north of the Bay. On this day the feeble barometric depression had developed very slightly only, and it was also advancing towards the north-west angle of the Bay, the centre being probably to the east of False Point. With the advance of the depression conditions became rather more favourable for rainfall, and on the 21st rainfall was almost general, but at the majority of stations it was not heavy. On the 22nd the depression had again advanced slowly in a west-north-westerly direction, and the centre was between Chaibassa and Balasore, but it was still very feeble, and the cyclonic circulation of winds accompanying it was only light to moderate in force. On the 23rd the depression had again moved in a west-north-westerly direction, and was probably to the west of Chota Nagpur, and pressure had continued to fall at the western stations, while a very rapid increase of pressure was taking place in the remainder of the province. The depression had hence practically ceased to affect the province on this day. The depression as usual brought up a moderate wave of monsoon winds, which continued to flow over the province in its rear, and hence for the last two days of the week, that is on the 22nd and 23rd instants, general and rather heavy rainfall was reported in all districts.

Hence for the first three or four days of the week only light monsoon conditions prevailed over the province, but for the last three days these conditions were much more strongly developed. The rainfall for the week has hence been considerably below the normal in all districts except Orissa and Chota Nagpur, the fall in the latter district being normal in amount and in the former considerably in excess.

*Pressure.*—The variations of the average pressure for the week from the normal have been to a great extent dependent on the feeble depression which has been previously described. In North and North-East Bengal and in North Bihar pressure has been almost normal, but in the southern districts, and particularly in the south-western parts of the province, pressure has been in decided defect, the defect ranging up to 0.06" and 0.07" in Orissa and in the neighbouring parts of South-West Bengal.

*Temperature.*—The mean temperature for the week has been below the normal in South-West Bengal, Bihar, Orissa and Chota Nagpur by about one to two degrees. On the other hand similar excess temperatures have been registered in North and East Bengal, while in Assam an excess of 1.9° has been registered. For the whole of Bengal the average mean temperature shows a defect of 0.4°.

*Rainfall.*—The average falls of rain in South-West Bengal, East Bengal, Orissa, and Chota Nagpur have equalled between two and three inches, while in North Bengal and Bihar they have equalled about an inch and a half. Compared with the normal falls for the week, and expressed as a percentage of that amount, the following figures are obtained:—South-West Bengal 73 per cent., North Bengal 33 per cent., East Bengal 55 per cent., Bihar 62 per cent., Orissa 127 per cent., and Chota Nagpur 99 per cent. Taking these provinces to have an equal value, the rainfall of Bengal for the week was equal to only 75 per cent. of the normal amount. In Assam, Dhubri has received 1.66 inches of rain during the week, Sib-sagar 6.29 inches and Silchar 9.27 inches.



The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the week ending Saturday, the 23rd of June 1894:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1894.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
South-West Bengal	93.4	78.1	90.2	79.6	84.9	-1.0	2.08	2.83	-0.75	3.39	3.30	+0.09	7.80	7.86	8.60	10.57
North Bengal	93.6	76.8	90.4	78.8	84.7	+1.7	1.56	4.72	-3.16	2.96	3.87	-0.91	6.63	13.51	9.52	18.82
East Bengal	90.7	77.1	87.9	78.6	83.3	+0.8	2.38	4.34	-1.96	3.76	4.30	-0.54	11.20	14.79	17.63	19.13
Bihar	96.3	77.9	93.2	80.0	86.6	-0.5	1.54	2.45	-0.91	2.33	2.50	-0.17	4.59	5.36	4.68	7.04
Orissa	93.3	76.8	88.8	79.3	84.1	-1.7	3.02	2.37	+0.65	3.60	2.69	+0.91	7.26	5.54	7.89	7.68
Chota Nagpur	90.4	74.5	88.2	76.2	82.2	-1.9	2.48	2.51	-0.03	3.00	2.94	+0.06	7.47	5.50	7.49	7.10
Assam	93.6	76.0	89.8	78.2	84.0	+1.9										

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 26th June 1894.

A. PEDLER,  
Meteorological Reporter to the Govt. of Bengal.

#### Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 17th to 23rd June 1894.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1894.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
June	17th	29.644	84.4	90.4	12.1	78.3	86.4	81.5	1.010	79.5	80	0.30
"	18th	600	86.5	94.0	15.0	79.0	89.6	84.5	1.118	82.7	81	Nil
"	19th	570	85.2	92.5	14.7	77.8	89.6	83.5	1.066	81.2	77	0.66
"	20th	514	85.8	91.0	10.4	80.6	87.6	82.5	1.044	80.6	80	0.22
"	21st	492	83.9	88.0	8.2	79.8	87.6	82.3	1.034	80.3	79	0.20
"	22nd	465	82.1	86.0	7.8	78.2	83.2	81.1	1.034	80.3	91	0.34
"	23rd	518	84.2	89.0	9.7	79.3	84.6	82.5	1.034	81.7	91	0.77

The mean 10 A.M. pressure of the seven days ... 29.543

The mean temperature of the seven days ... 84.6

The extreme variation of temperature ... 16.2

The maximum temperature ... 94.0

The mean 10 A.M. relative humidity of the seven days ... 83

The total fall of rain from 17th to 23rd June 1894 ... 2.49

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,  
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,  
The 25th June 1894.

## IRRIGATION DEPARTMENT,--BENGAL.

and, I am not showing heights over mean sea-level and low-water in the Rivers Ganves, Bhairathi, Jalangi, and Brahmaputra for the month of May 1894.

[illegible]

Zero placed at 148.76 feet above mean sea-level.

CALCUTTA,  
The 26th June 1894.

J. H. TOOGOOD,  
*Under-Secy. to the Govt. of Bengal.*



## CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 23rd June 1894, as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 23RD JUNE 1894.			WEEK ENDING SATURDAY, THE 24TH JUNE 1893.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	410	53,850	685	142	20,450	283
Jute ...	24	8,775	140	5	2,125	44
Firewood ...	91	66,800	966	56	31,650	471
Other articles ...	756	2,20,450	3,343	644	1,46,800	2,074
Total ...	1,281	3,49,875	5,134	847	2,00,025	2,872

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

*Approximate Return of Traffic for week ended 16th June 1894, on 1,659 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
Total traffic for the week ...	327,649	Rs. A. P. 8,13,169 14 0	Mds. S. 31,24,826 10	Rs. A. P. 6,07,826 10 0	Rs. A. P. 18,406 13 0	Rs. A. P. 9,99,403 5 0	75,652	121,204	196,856
Or per mile of railway ...	.....	188 12 4	.....	402 8 9	11 1 6	602 6 7	.....	.....	.....
For previous 22½ weeks of half-year ...	7,628,824	82,41,585 0 0	7,73,82,596 20	1,71,48,299 0 0	4,19,248 1 0	2,58,09,132 1 0	1,812,857½	2,943,116½	4,755,973½
Total for 23½ weeks ...	7,956,483	85,54,754 14 0	8,05,07,422 30	1,78,16,125 10 0	4,37,654 14 0	2,68,08,535 6 0	1,888,509½	3,064,319½	4,952,829½
COMPARISON.									
Total for corresponding week of previous year ...	305,539	3,04,463 13 4	27,70,310 30	6,16,775 11 3	17,235 15 7	9,38,475 8 2	75,311	115,455	190,766
Per mile of railway corresponding week of previous year ...	.....	189 0 9	.....	382 15 7	10 11 3	582 11 7	.....	.....	.....
Total for corresponding 24 weeks of previous year ...	7,694,505	75,79,211 10 9	7,34,11,329 30	1,68,37,985 11 1	4,07,925 1 2	2,48,85,122 7 0	1,844,574	2,862,351	4,706,925

## TARKESSUR BRANCH RAILWAY.

*Approximate Return of Traffic for week ended 16th June 1894, on 22½ miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
Total traffic for the week ...	*24,048	Rs. A. P. *6,550 15 0	Mds. S. 15,053 10	Rs. A. P. 532 2 0	Rs. A. P. 13 0 0	Rs. A. P. 7,066 1 0	844	124	968
Or per mile of railway ...	.....	294 6 9	.....	23 14 8	0 9 4	318 14 9	.....	.....	.....
For previous 22½ weeks of half-year ...	†544,359	†1,41,086 5 0	†4,46,020 0	†16,749 13 0	§305 0 0	1,58,141 2 0	20,478	2,336	22,814
Total for 23½ weeks ...	569,007	1,47,637 4 0	4,61,073 10	17,281 15 0	318 0 0	1,65,237 3 0	21,322	2,460	23,782
COMPARISON.									
Total for corresponding week of previous year ...	16,892½	4,095 9 4	9,227 30	394 2 0	11 15 0	4,501 10 4	870	98	968
Per mile of railway corresponding week of previous year ...	.....	184 1 2	.....	17 11 5	0 8 7	202 5 2	.....	.....	.....
Total for corresponding 24 weeks of previous year ...	544,603	1,42,405 3 3	2,70,091 10	9,400 11 0	268 15 0	1,52,071 13 3	21,426	2,440	23,876

\* The increase is due to bookings in connection with the "Dassohara" bathing festival.

† Added number of passengers 1,831 and Rs. 813 on account of difference between the approximate and audited figures for the week ended 12th May 1894.

‡ Ditto Mds. 33 and deducted

§ Deducted



## DELHI-UMBALLA-KALKA RAILWAY.

*Approximate Return of Traffic for the week ended 16th June 1894, on 161½ miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	22,598	14,840 13 0	49,376 10	7,996 5 0	49 0 0	22,796 2 0	5,574½	3,445½	9,020½
Or per mile of railway ...	.....	91 15 3	.....	49 15 9	0 4 10	141 3 10	.....	.....	.....
For previous 23½ weeks of half-year ...	*552,177	*4,21,171 3 0	†15,23,752 0	†2,11,446 4 0	†1,763 0 0	6,34,380 7 0	133,597½	77,467½	211,065½
Total for 23½ weeks ...	574,775	4,36,012 0 0	15,73,128 10	2,19,332 9 0	1,812 0 0	6,57,176 9 0	139,172½	80,913½	220,085½
COMPARISON.									
Total for corresponding week of previous year ...	19,664†	13,121 13 0	1,00,659 0	8,013 13 0	46 6 6	21,182 0 6	5,976	3,059	9,035
Per mile of railway corresponding week of previous year ...	.....	81 4 10	.....	49 10 5	0 4 7	131 3 10	.....	.....	.....
Total for corresponding 24 weeks of previous year ...	455,482	3,34,439 0 10	17,76,475 20	2,20,190 3 3	1,130 14 0	5,55,760 2 1	141,648	77,419	219,067

\* Added number of passengers 535 and deducted Rs. 193 } on account of difference between the approximate and audited figures for the week ended 12th  
† Do. Mds. 1,157 and deducted " 415 }  
‡ Deducted " 55 } May 1894.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BEHAR SECTIONS.)

*Approximate Return of Traffic for the week ended 16th June 1894, on 813 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	176,650	93,930 0 0	5,78,920 0	96,630 0 0	12,450 0 0	2,02,410 0 0	29,170	26,613	55,783
Or per mile of railway ...	217	115 0 0	712 0	118 0 0	*1 0 0	234 0 0	.....	.....	.....
For previous 23 weeks of half-year† ...	4,625,887	22,03,846 0 0	1,84,19,630 0	24,27,506 0 0	6,25,425 0 0	62,56,777 0 0	668,995	674,448	1,343,443
Total for 24 weeks ...	4,802,537	22,97,776 0 0	1,89,98,550 0	25,23,536 0 0	6,37,875 0 0	54,39,187 0 0	698,165	701,661	1,399,226
COMPARISON.									
Total for corresponding week of previous year ...	161,319‡	73,657 13 6	5,31,032 0	88,914 12 3	11,210 12 3	1,75,783 6 0	28,203	23,830	52,033
Per mile of railway corresponding week of previous year ...	208	95 0 0	633 0	114 0 0	*1 0 0	210 0 0	.....	.....	.....
Total to corresponding date of previous year ...	4,819,712‡	20,27,628 11 5	1,76,60,857 0	22,12,097 2 6	3,75,528 4 2	46,15,254 2 8	686,069	667,876	1,353,945

\* Excluding steamer earnings.  
† Audited up to 28th April 1894.

## BENGAL CENTRAL RAILWAY.

*Approximate Return of Traffic for the week ended 16th June 1894, on 125 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	38,620	19,310 0 0	35,920 0	2,490 0 0	60 0 0	21,860 0 0	3,309	2,363	5,672
Or per mile of railway ...	309	154 0 0	287 0	20 0 0	1 0 0	175 0 0	.....	.....	.....
For previous 23 weeks of half-year* ...	763,581	2,62,037 0 0	13,83,374 0	87,107 0 0	3,288 0 0	3,69,432 0 0	88,136	42,066	130,202
Total for 24 weeks ...	807,201	2,81,347 0 0	14,19,294 0	89,597 0 0	3,348 0 0	3,74,292 0 0	91,445	44,429	135,874
COMPARISON.									
Total for corresponding week of previous year ...	22,779	9,780 14 6	64,265 0	3,880 2 0	64 15 0	13,725 15 6	3,309	2,363	5,672
Per mile of railway corresponding week of previous year ...	238	78 0 0	514 0	31 0 0	1 0 0	110 0 0	.....	.....	.....
Total to corresponding date of previous year ...	760,581	2,64,327 4 2	16,12,752 0	99,659 9 3	2,724 6 2	3,66,711 3 7	88,794	47,493	136,292

\* Audited up to 28th April 1894.

## DACCA STATE RAILWAY.

*Approximate Return of Traffic for the week ended 16th June 1894, on 86 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	13,340	5,330 0 0	11,630 0	1,050 0 0	60 0 0	6,440 0 0	2,487	737	3,224
Or per mile of railway ...	155	62 0 0	135 0	12 0 0	1 0 0	75 0 0	.....	.....	.....
For previous 23 weeks of half-year* ...	461,370	1,48,752 0 0	5,08,784 0	47,973 0 0	4,668 0 0	2,01,333 0 0	56,066	18,112	74,178
Total for 24 weeks ...	474,710	1,54,082 0 0	5,20,434 0	49,023 0 0	4,728 0 0	2,07,833 0 0	58,553	18,849	77,402
COMPARISON.									
Total for corresponding week of previous year ...	16,737	4,920 0 0	15,202 0	1,319 0 0	192 0 0	6,431 0 0	1,711	1,513	3,224
Per mile of railway corresponding week of previous year ...	195	57 0 0	177 0	16 0 0	2 0 0	75 0 0	.....	.....	.....
Total to corresponding date of previous year ...	426,893	1,32,837 0 0	3,65,303 0	32,969 0 0	4,229 0 0	1,70,076 0 0	41,025	36,506	77,531

\* Audited up to 28th April 1894.

## BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

*Approximate Return of Traffic for the week ending 16th June 1894, on 756 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open ...	101,440	40,290	4,06,490	65,810	12,910	(b) 1,19,010	12,605	23,464	36,069
Or per mile of railway ...	134'18	53'29	536'73	87'05	17'08	157'42	.....	.....	.....
For previous 22½ weeks of half-year (a) ...	2,521,388	10,84,773	1,03,83,929	14,87,005	2,03,080	28,64,858	322,034	448,915	771,849
Total for 23½ weeks ...	2,622,828	11,25,063	1,08,80,419	15,52,815	3,05,990	29,83,868	335,139	472,379	807,918
COMPARISON.									
Total for corresponding week of previous year on 756 miles open ...	90,872	38,678	3,52,146	49,576	13,730	1,01,984	13,789	18,630	32,439
Per mile of corresponding week of previous year ...	132'11	51'16	465'80	65'58	18'16	134'90	.....	.....	.....
Total to corresponding date of previous year ...	2,448,705	10,57,569	1,14,98,894	16,15,437	3,40,756	29,93,762	328,436	475,090	803,436

(a) Includes audited figures up to week ending 6th May 1894.

(b) Due to improvement in traffic.

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 16th June 1894 ...	14,196	0	0
Corresponding period of 1893 ...	14,166	0	0
Increase ...	30	0	0
Receipts per mile for the week ending 16th June 1894 ...	278	5	8
Corresponding period of 1893 ...	277	12	3
Increase ...	0	9	5
Receipts from 1st January to 16th June 1894 ...	2,81,667	0	0
Corresponding period of 1893 ...	2,89,283	0	0
Decrease ...	7,616	0	0





# The Calcutta Gazette.

EXTRAORDINARY.

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FRIDAY, JANUARY 26, 1894.

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Government of Bengal.

JUDICIAL DEPARTMENT.

NOTIFICATION.

*Calcutta, the 26th January 1894.*

THE following Notification, which has been published in advance in a *Gazette of India* Extraordinary of this day's date, is republished for general information.

H. J. S. COTTON,

*Chief Secretary to the Govt. of Bengal.*

HOME DEPARTMENT.

NOTIFICATION.

PUBLIC.

*Calcutta, the 27th January 1894.*

No. 176.

His Excellency the Marquess of Lansdowne will leave Government House *en route* for England at 9-15 A.M. on Saturday, the 27th instant. His Lordship will embark with his suite from Prinsep's Ghât on board the R.I.M.S. *Warren Hastings*.

His Excellency the Viceroy and Governor-General desires that the same honours which were accorded to himself upon his recent arrival in Calcutta shall be paid to the Marquess of Lansdowne upon the occasion of His Lordship's leaving Calcutta after resigning the office of Viceroy and Governor-General of India.

A Guard of Honour of British Infantry and a Guard of Honour of the Administrative Battalion Presidency Volunteers will be drawn up opposite the grand entrance of Government House. A Guard of Honour of Native Infantry will be drawn up opposite Prinsep's Ghât.

The line of route from the entrance of Government House to Prinsep's Ghât will be lined throughout by troops under the orders of the Brigadier-General Commanding the Presidency District.

A Royal Salute will be fired from the ramparts of Fort William as the Marquess of Lansdowne leaves Government House, and another Royal Salute will be fired as Lord Lansdowne embarks at Prinsep's Ghât.



All officers of Government (excepting those mentioned below) will be in attendance upon the grand staircase of Government House. Consular officers and other representatives of Foreign Governments at Calcutta and non-official gentlemen are invited to be present on the grand staircase.

The Marquess of Lansdowne will be escorted from Government House to Prinsep's Ghât by the Viceroy's Body Guard and the Calcutta Light Horse.

The Lieutenant-Governor of Bengal, attended by his personal staff, will be present at Prinsep's Ghât.

The Members of the Governor-General's Council will also be present at Prinsep's Ghât.

The following officers will be in attendance at Prinsep's Ghât:—

Secretaries to the Government of India.

The Commissioner of the Presidency Division.

One of the Secretaries to the Government of Bengal.

The Brigadier-General Commanding the Presidency District, with the district staff.

The Commissioner of Police, Calcutta.

The Chairman of the Commissioners of Calcutta.

The Sheriff of Calcutta.

The Magistrate of the 24-Parganas.

An Aide-de-Camp to the Viceroy will attend upon the Marquess of Lansdowne as far as Diamond Harbour.

The troops will not be withdrawn until the receipt of orders to that effect.

Full dress will be worn by the troops and by Civil and Military Officers on this occasion, and morning dress by all gentlemen not entitled to wear uniform.

C. J. LYALL,

*Secretary to the Govt. of India.*

